

## Supplementary Material

### Synthesis of some new 5-arylidene-2,4-thiazolidinedione esters

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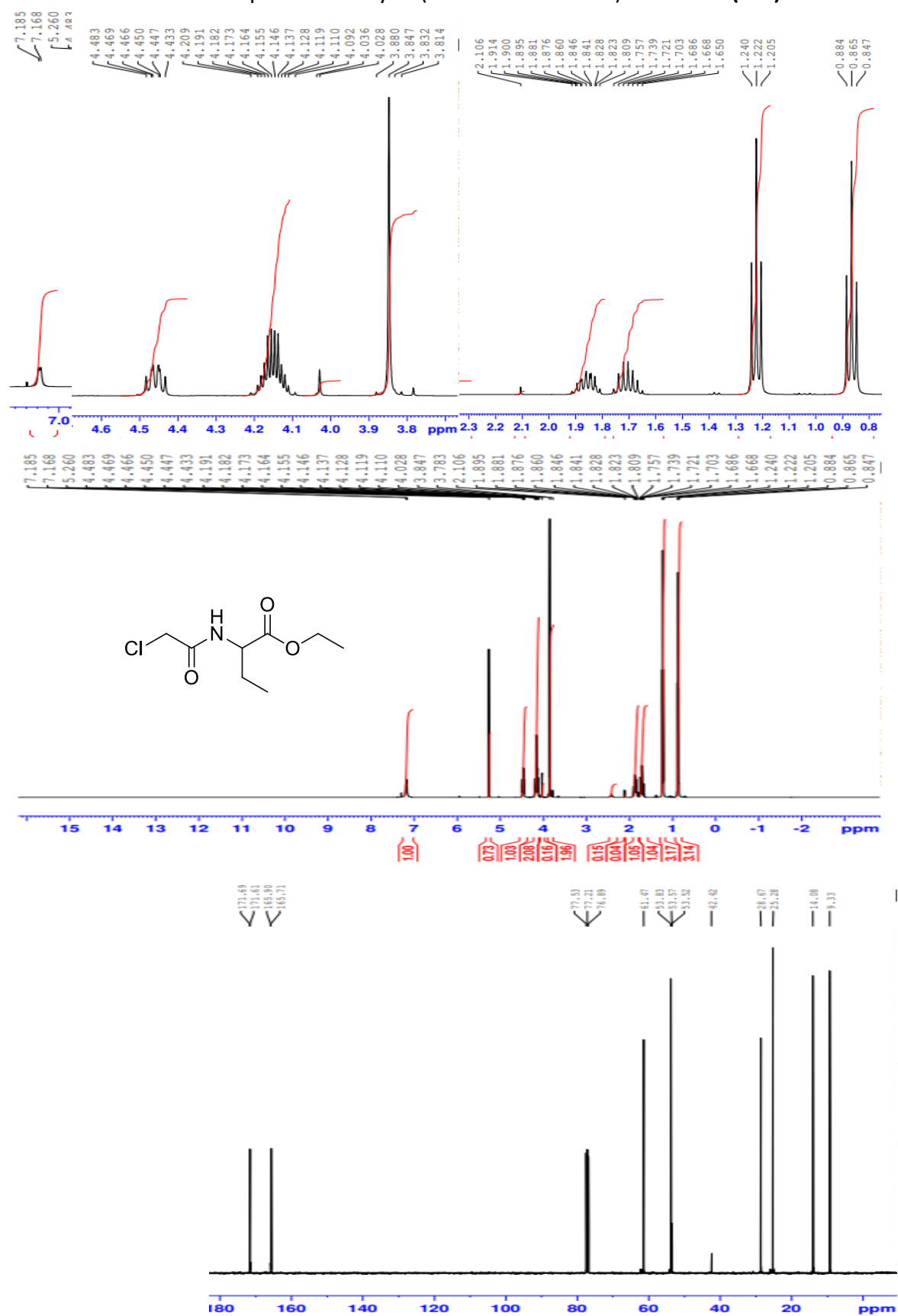
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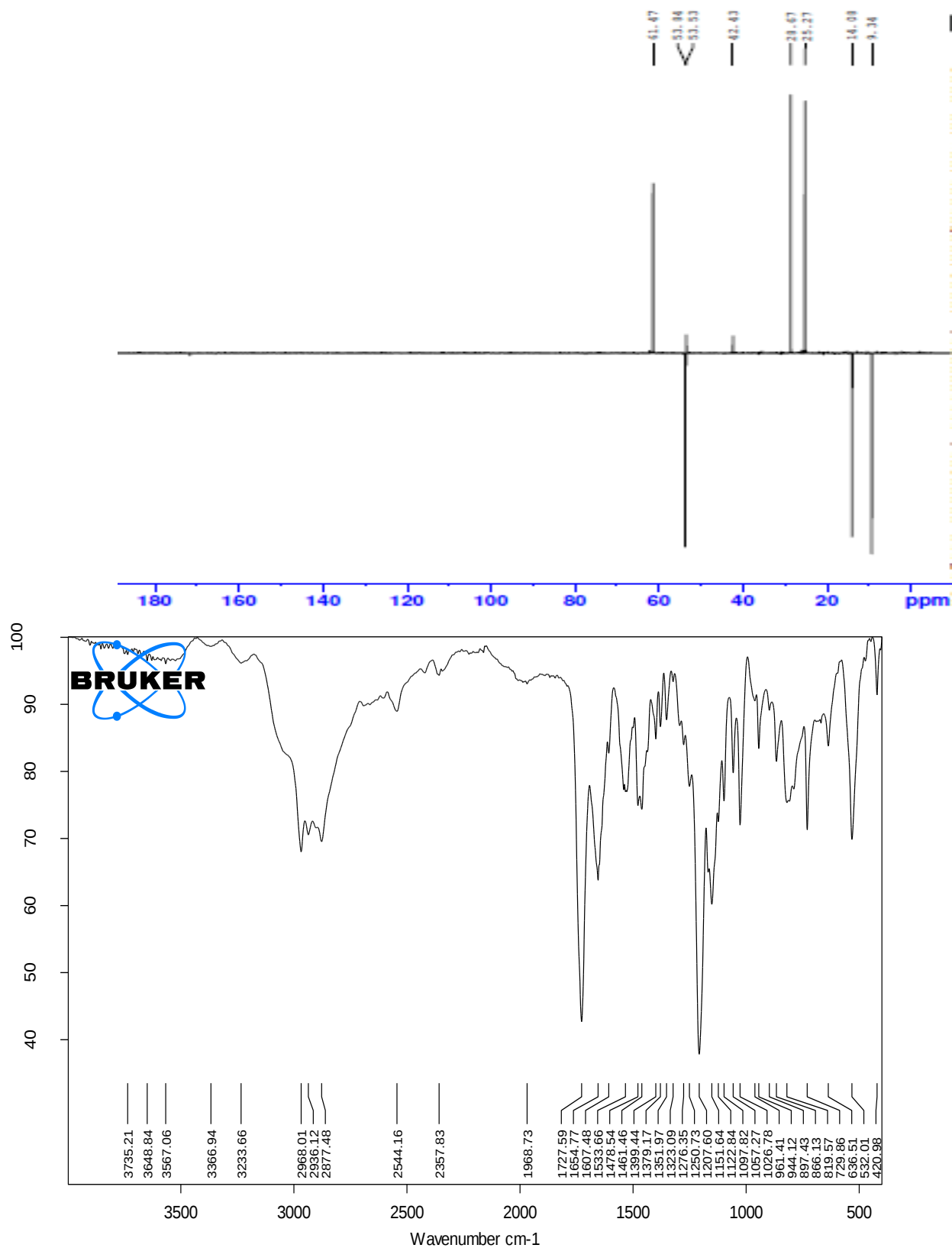
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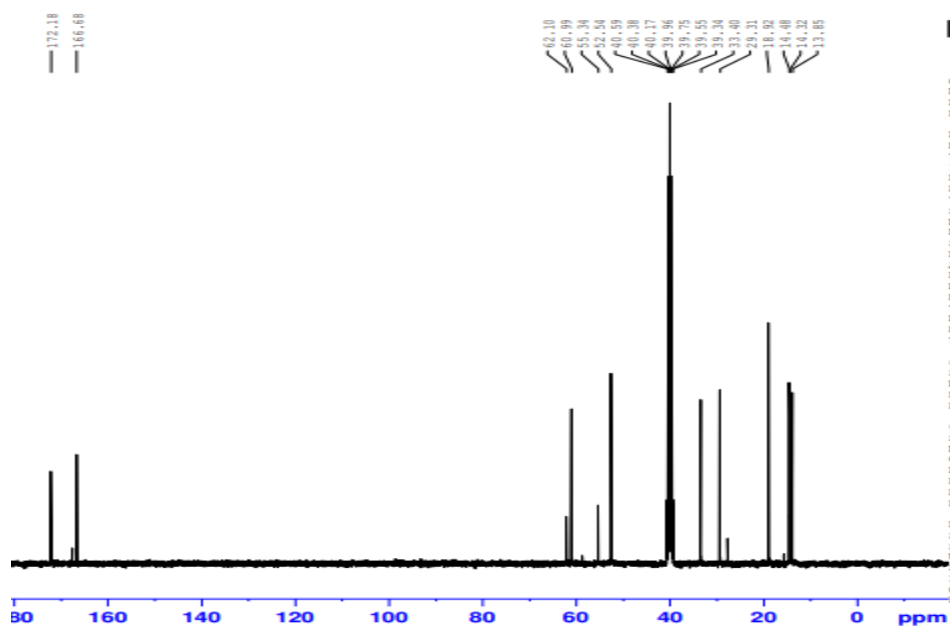
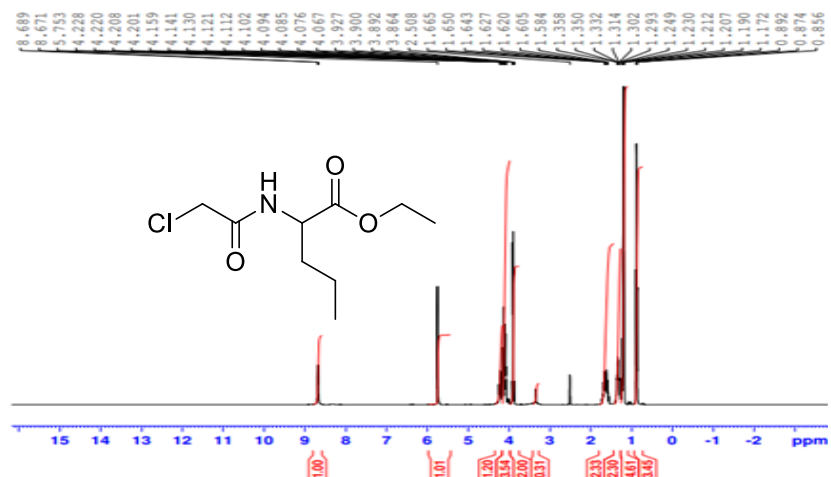
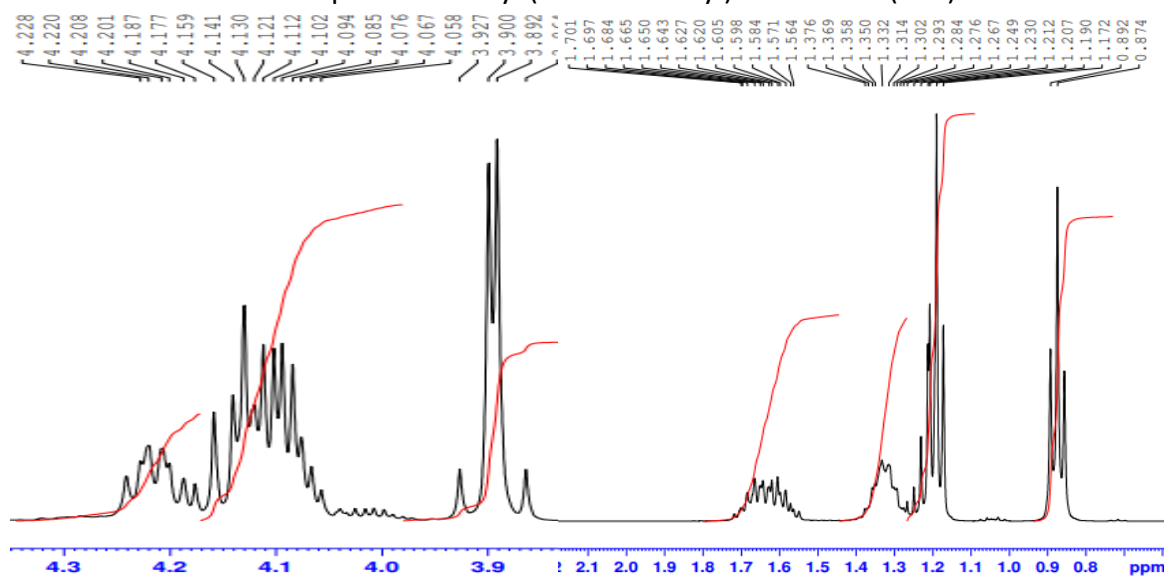
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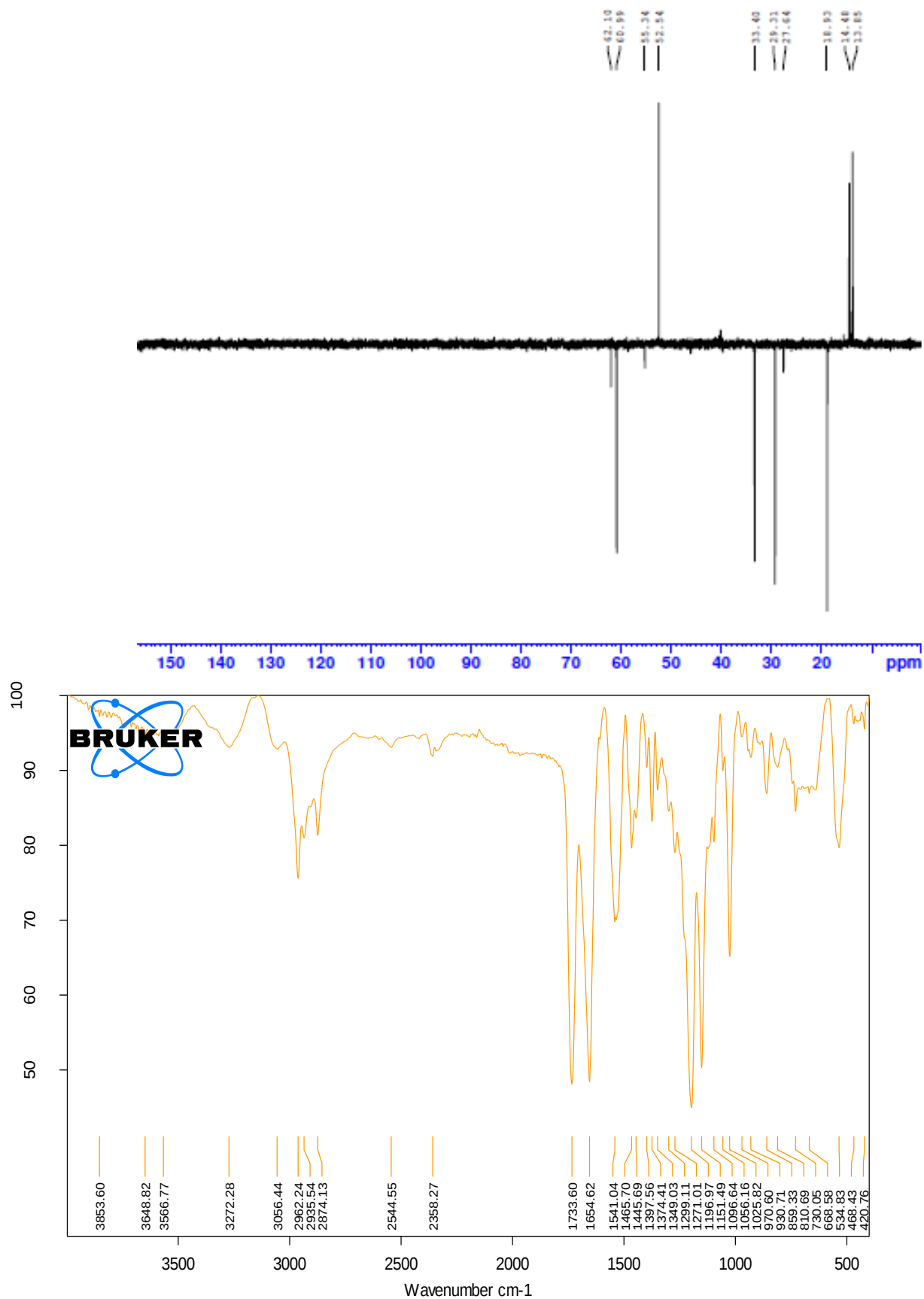
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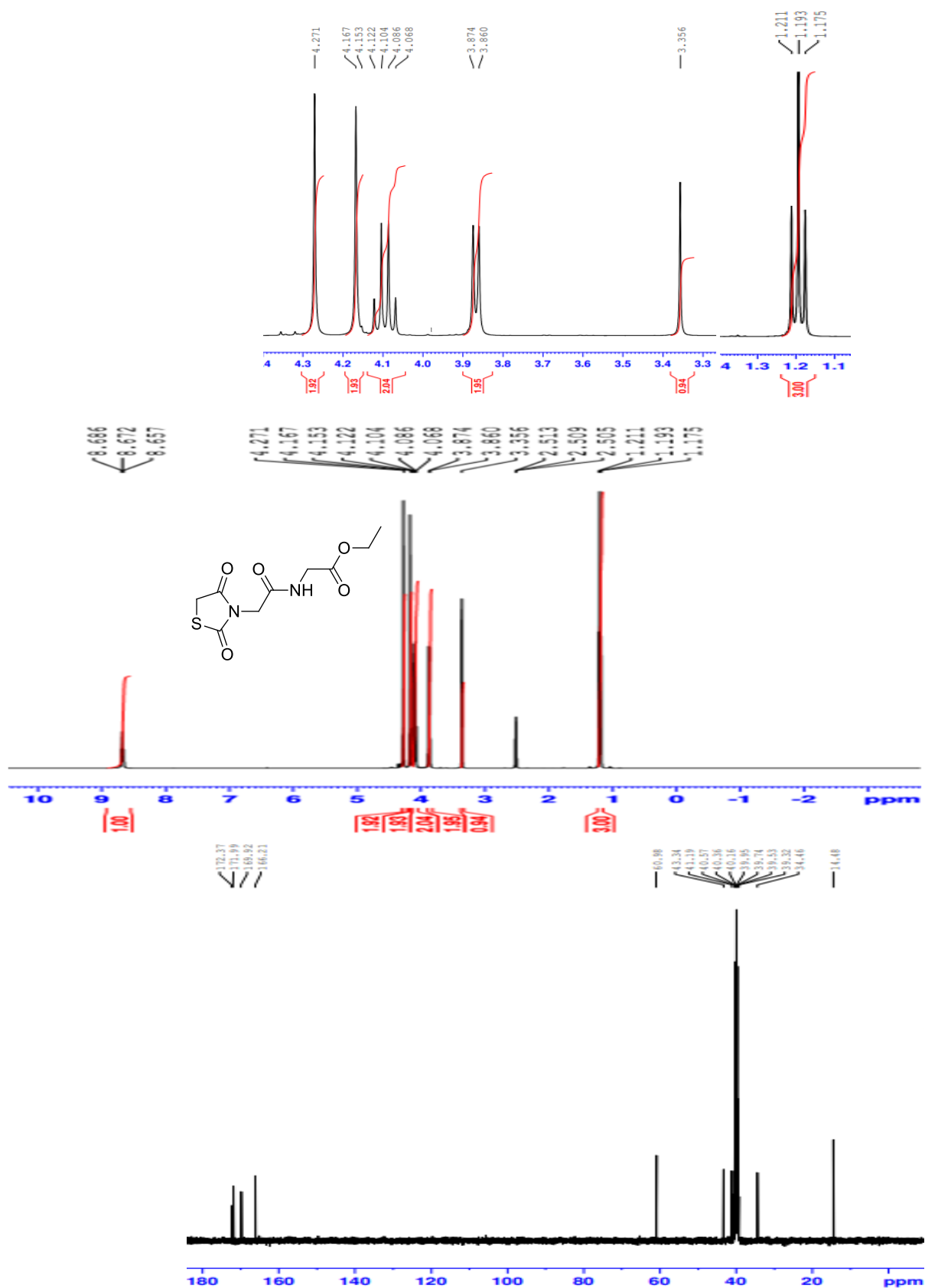
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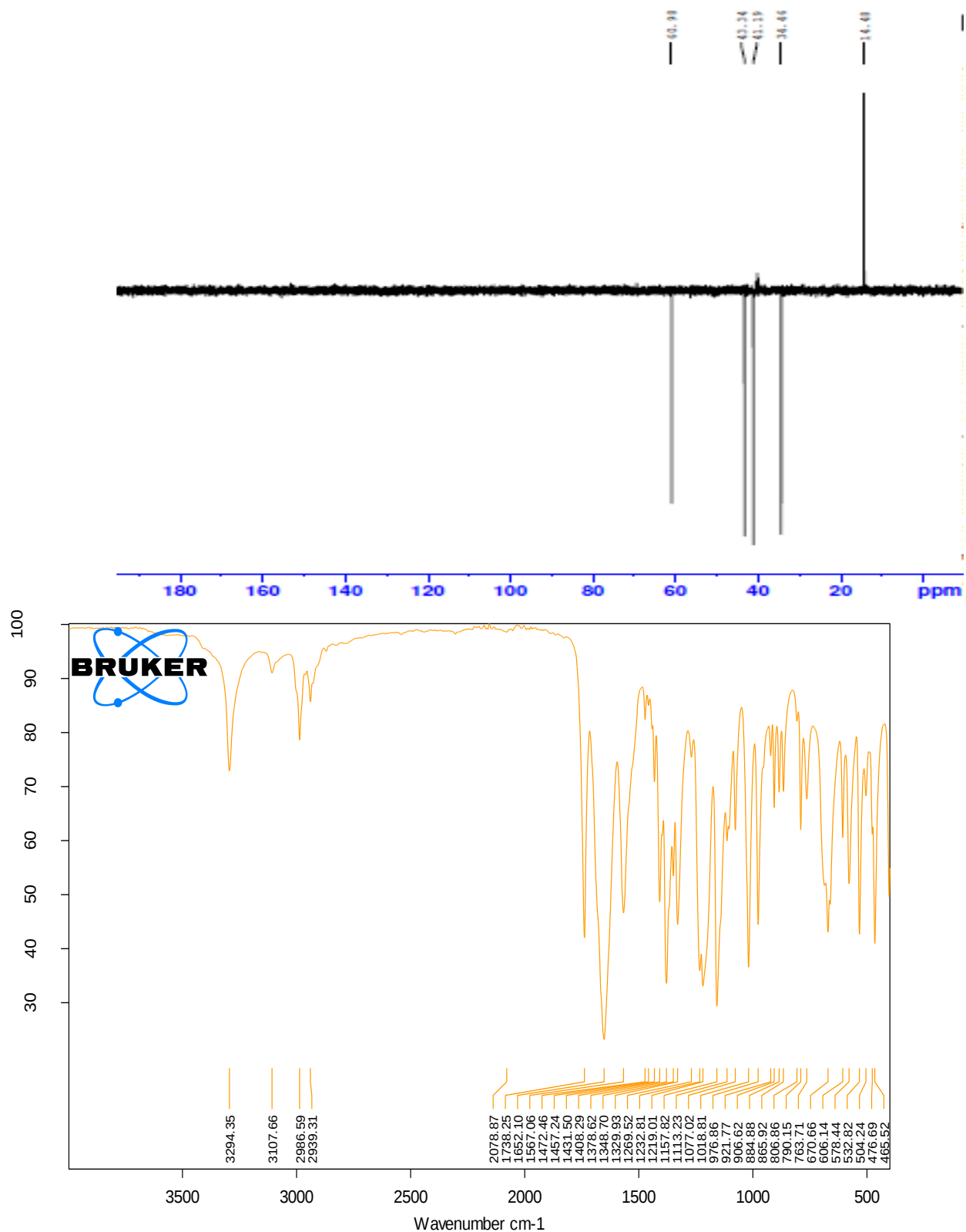
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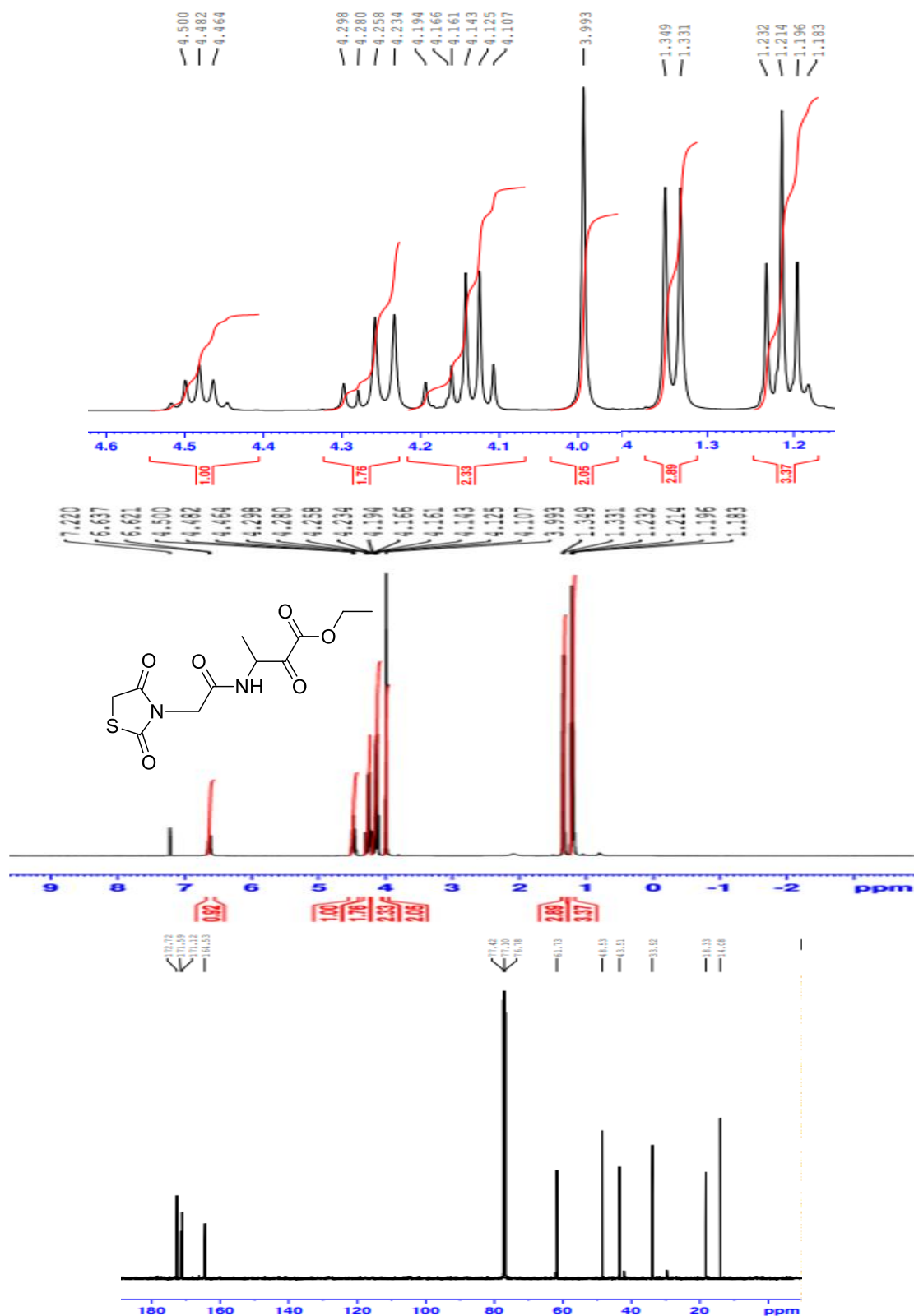
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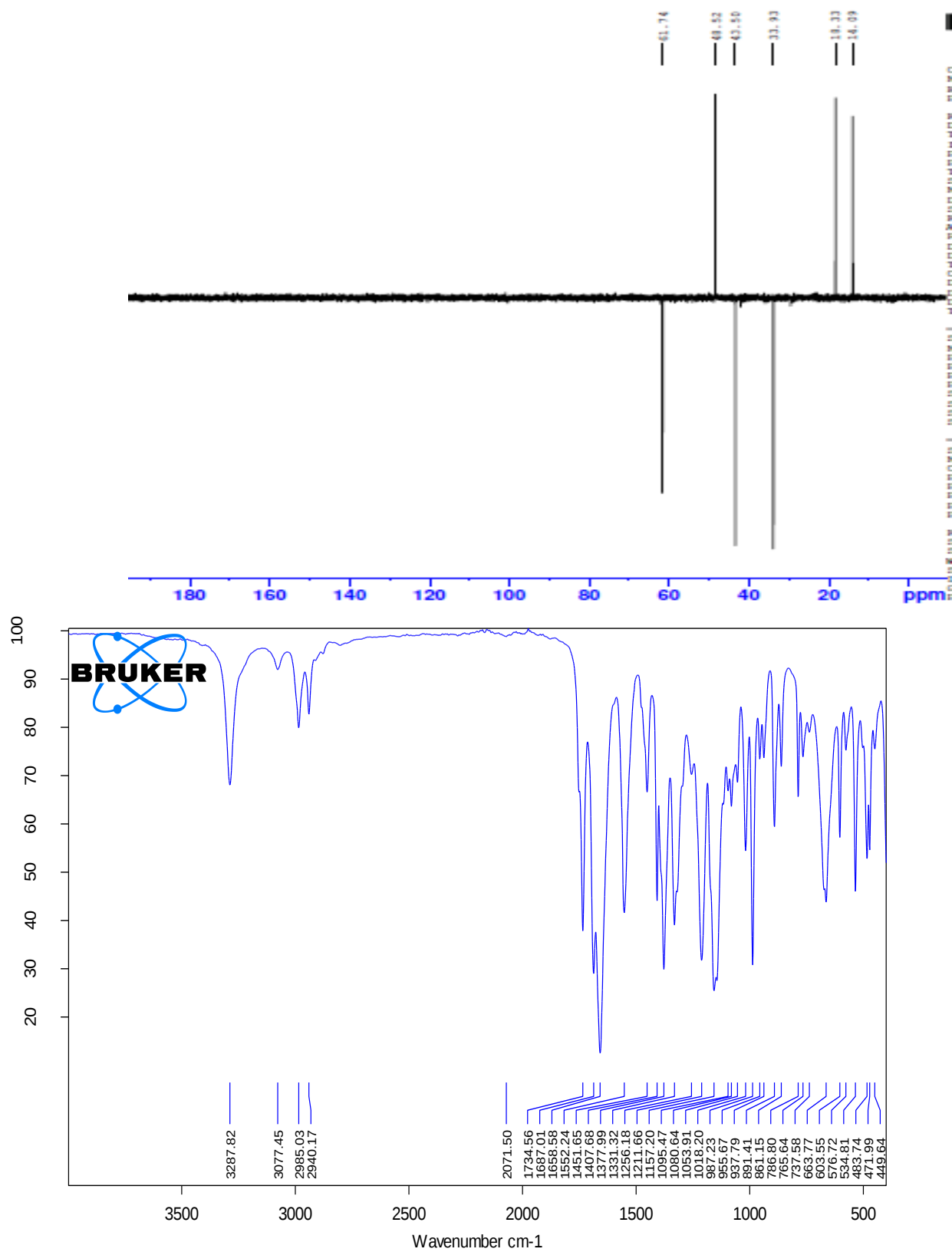
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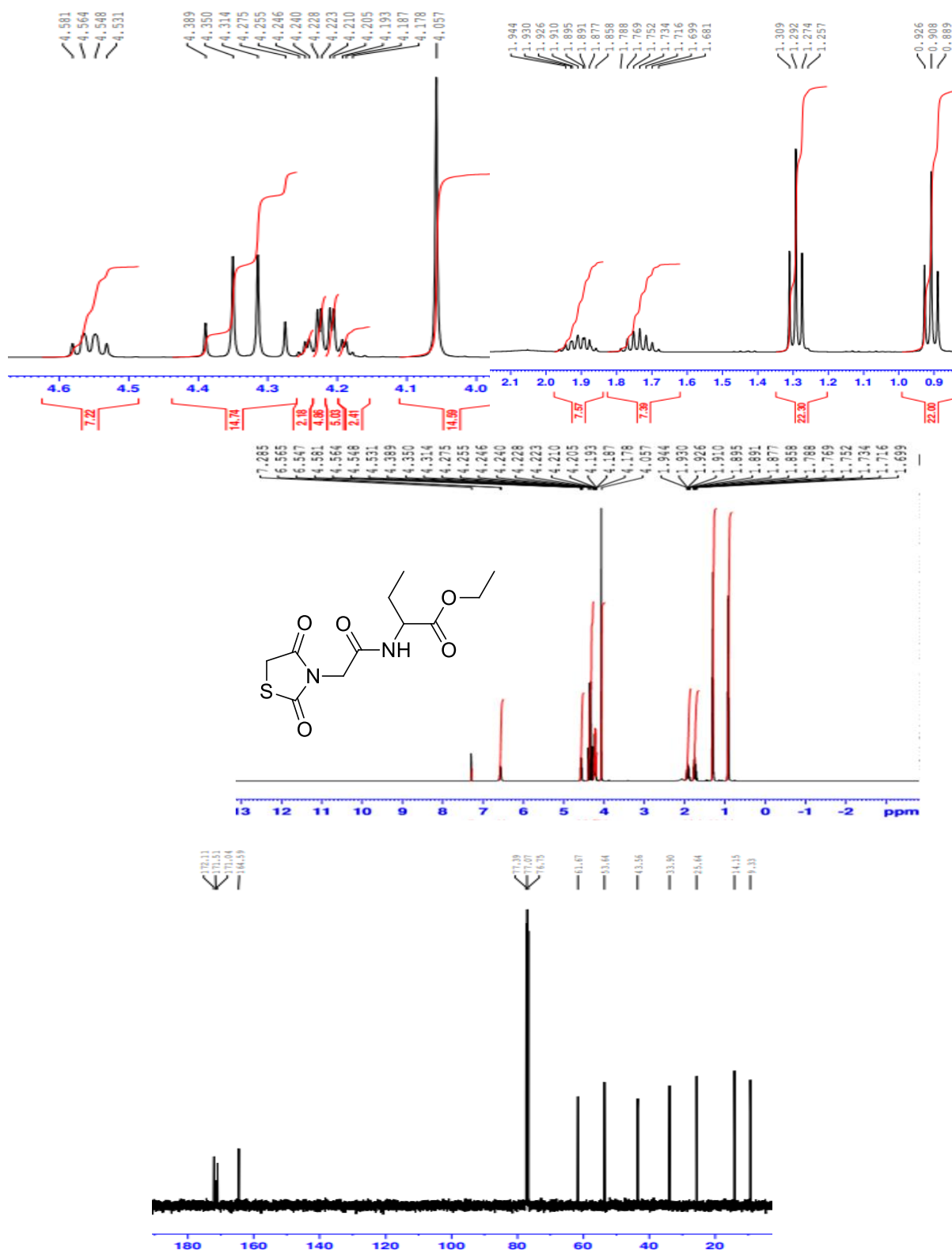
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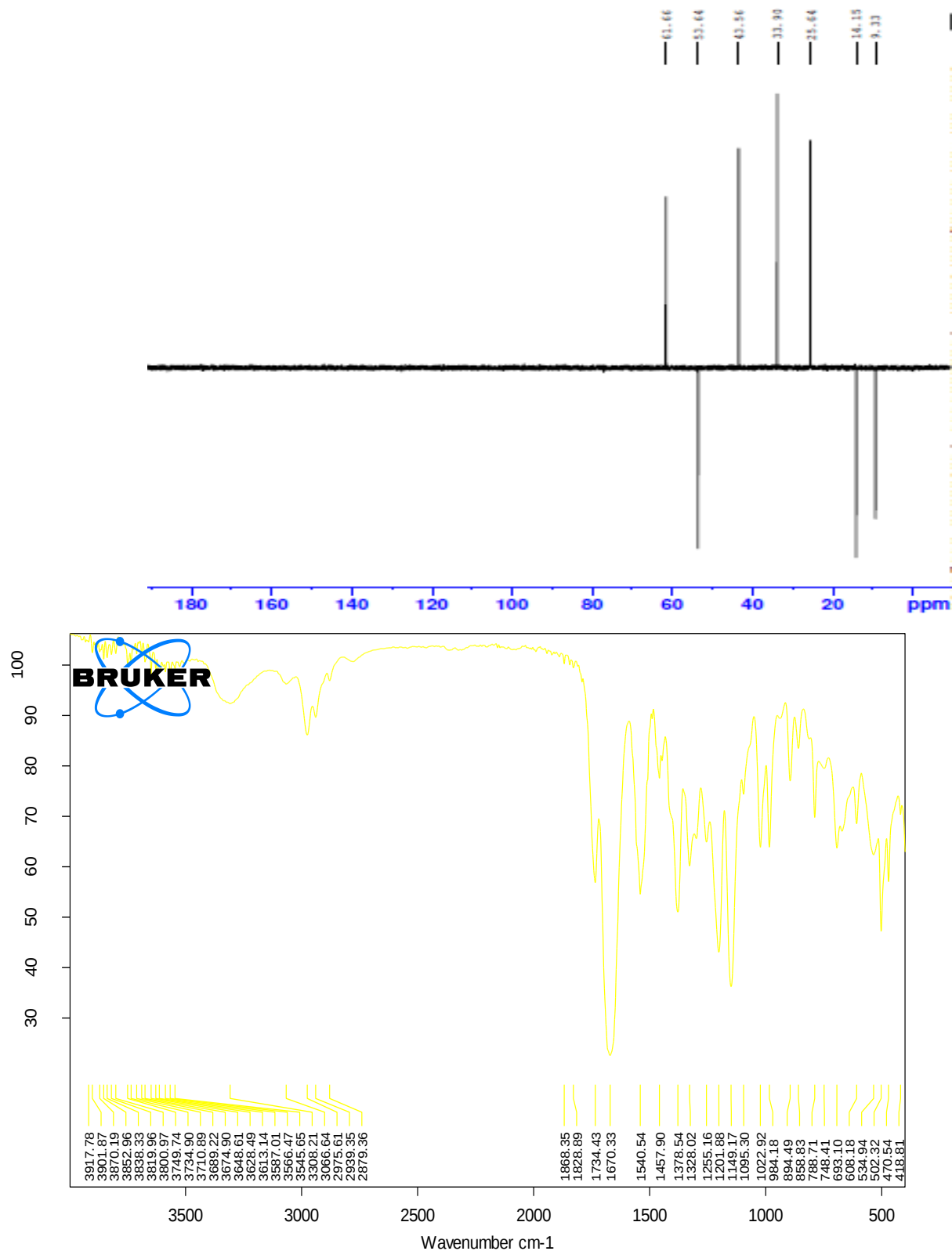
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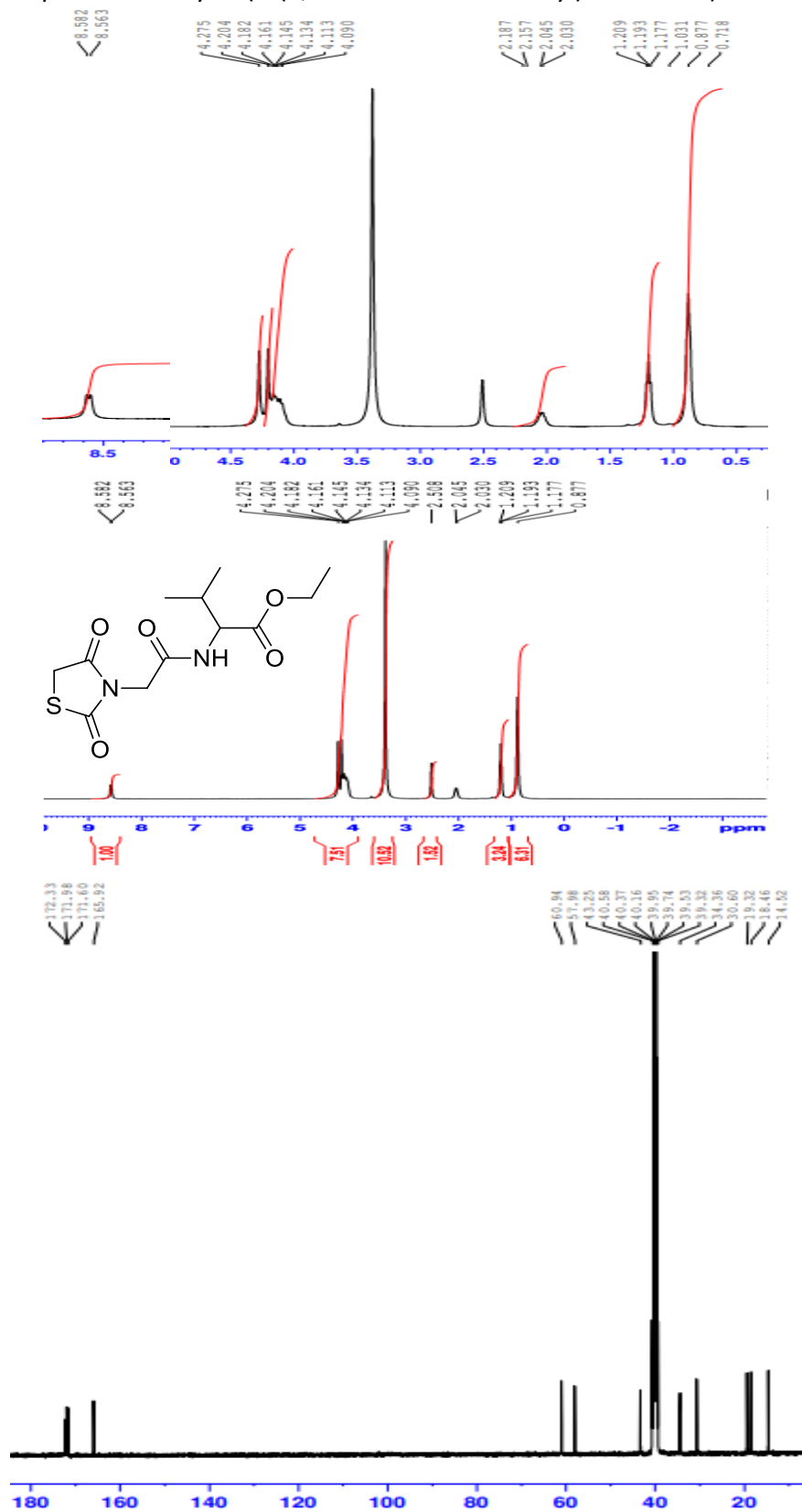
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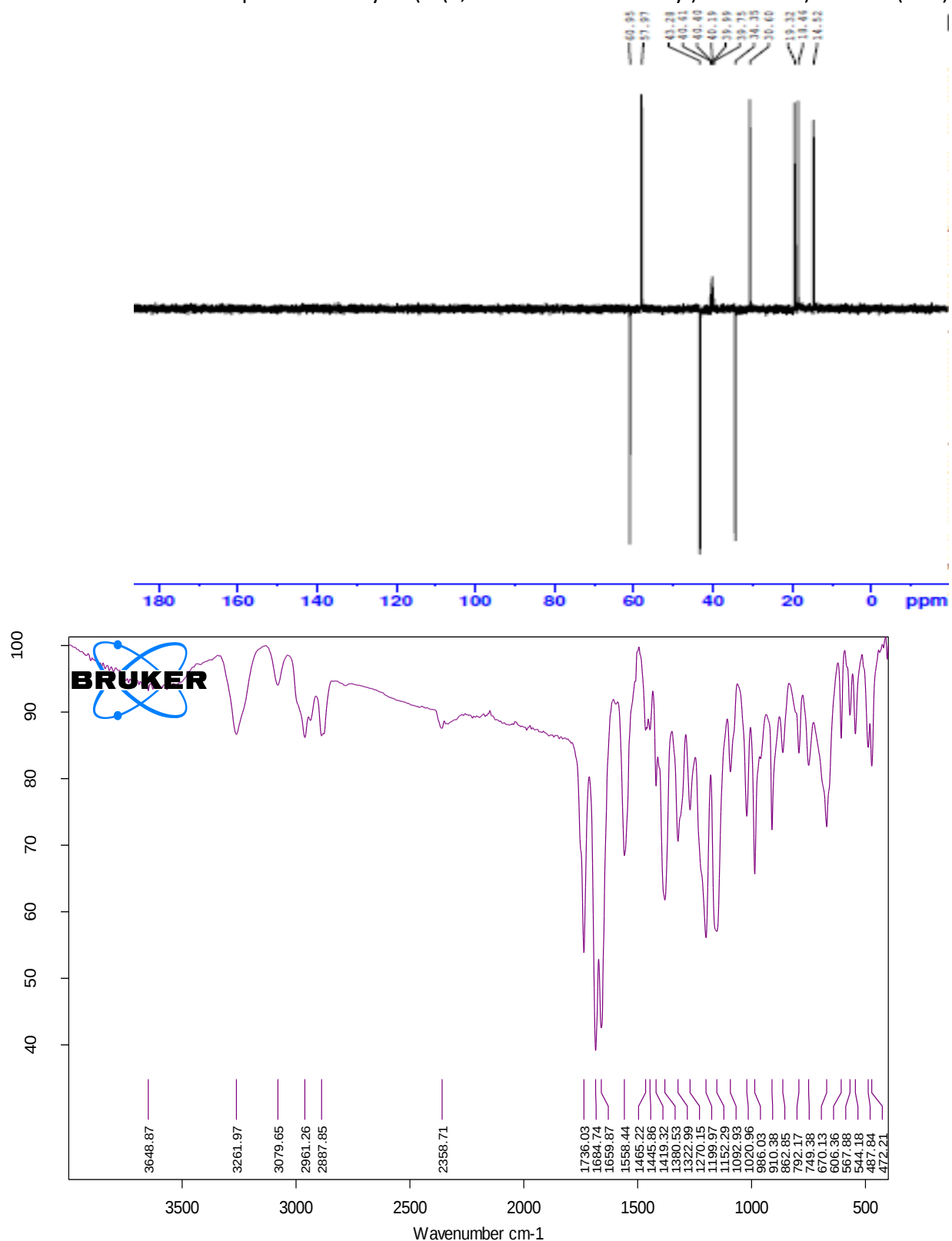
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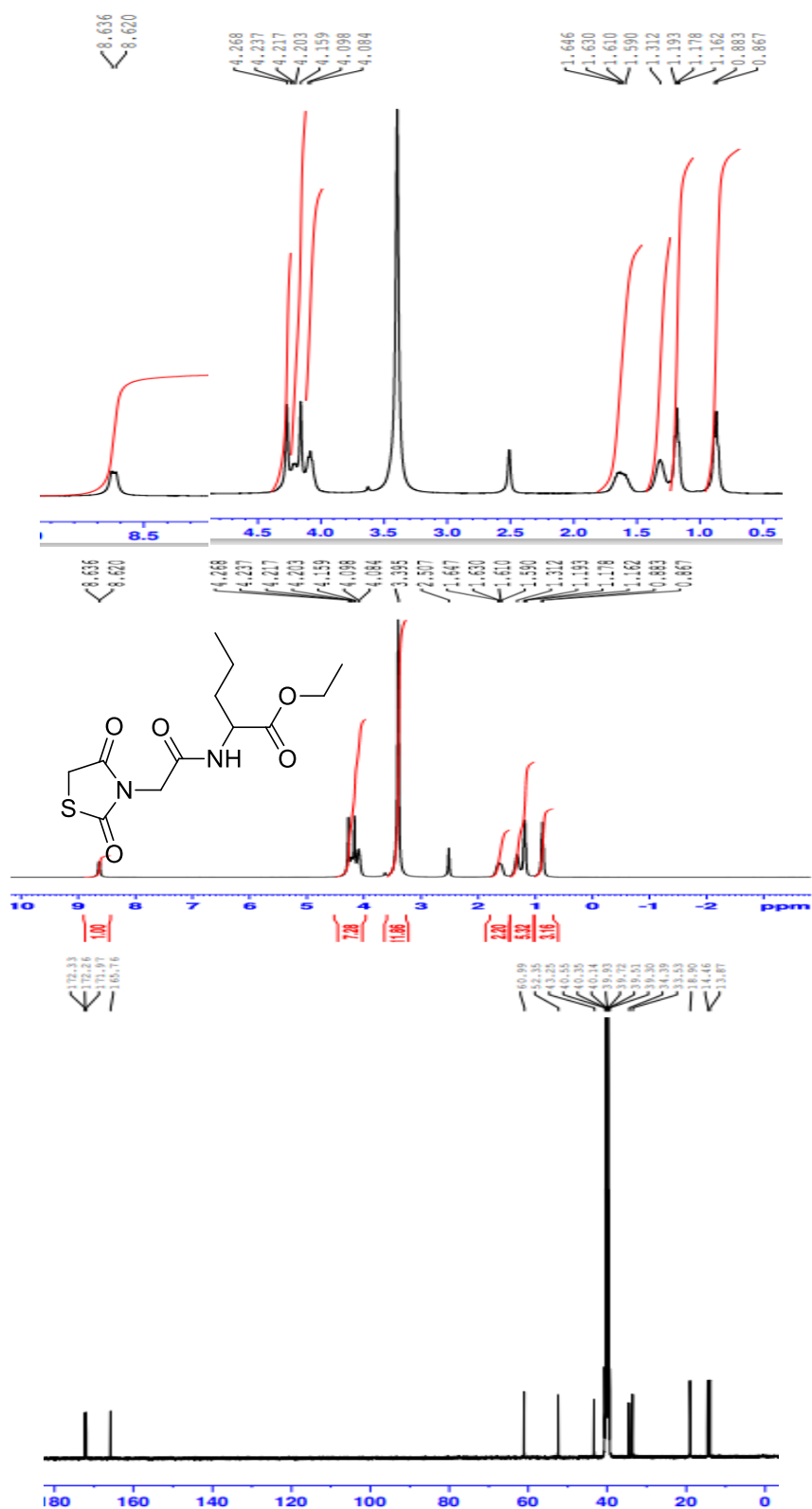
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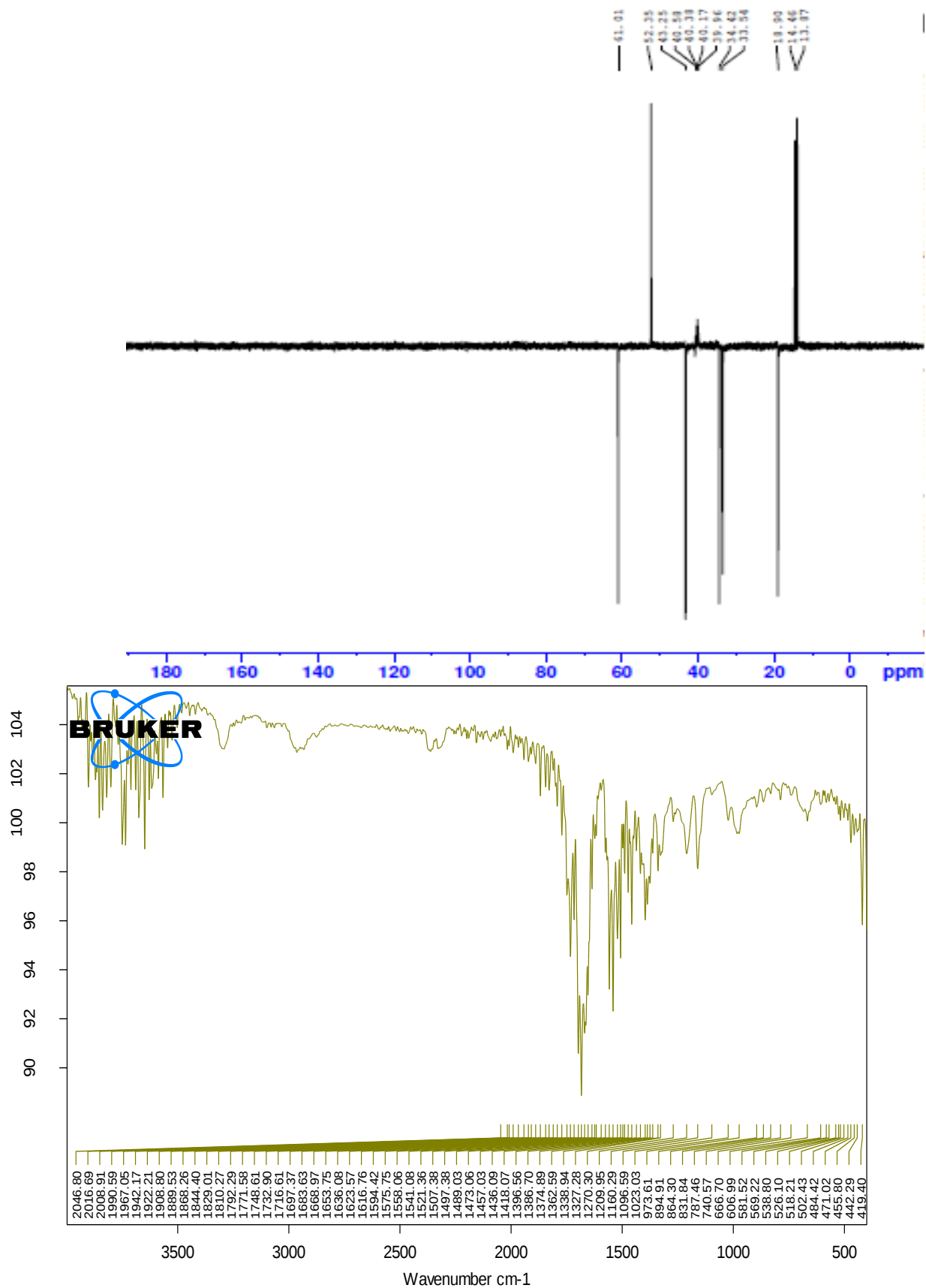
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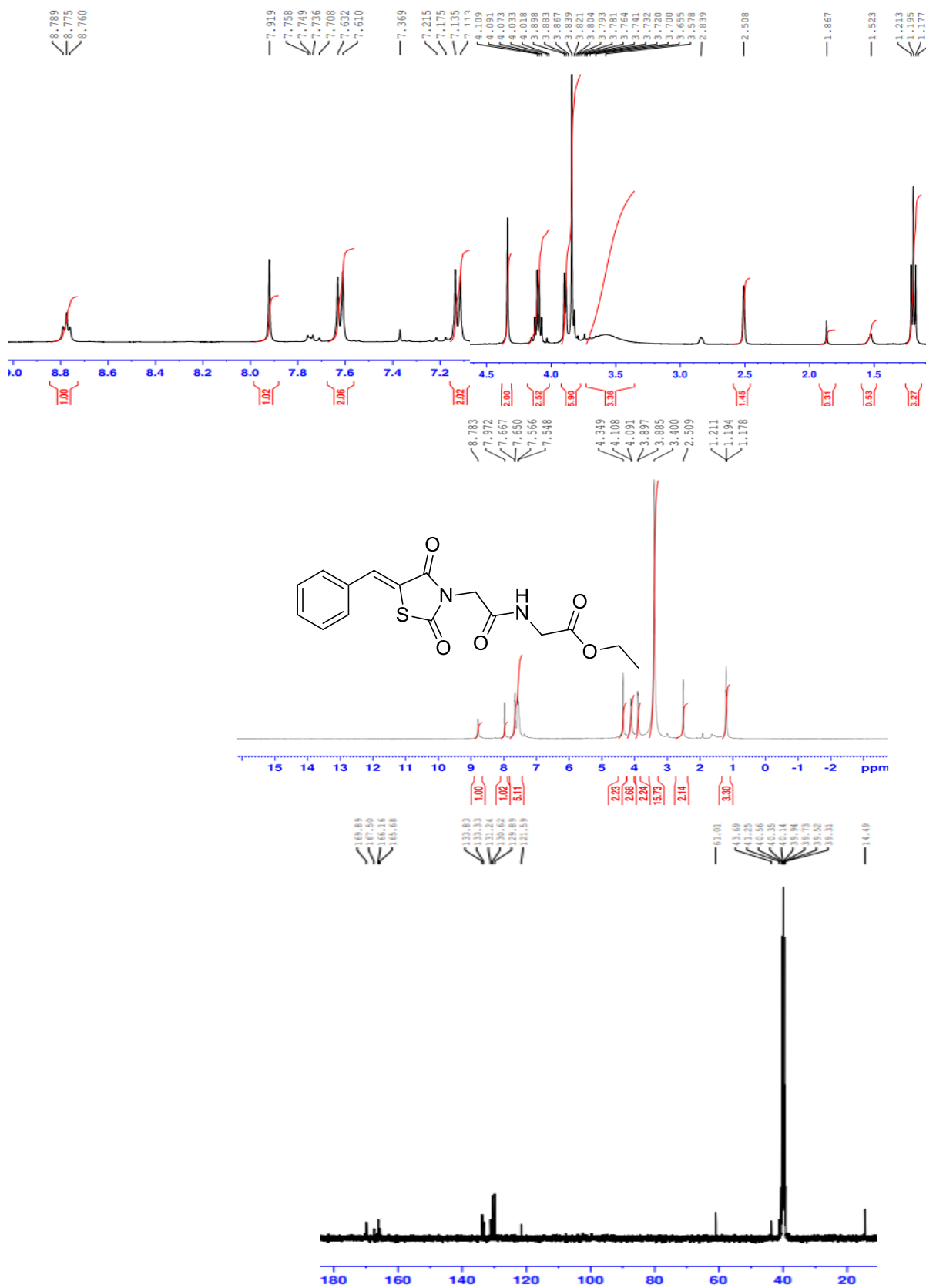
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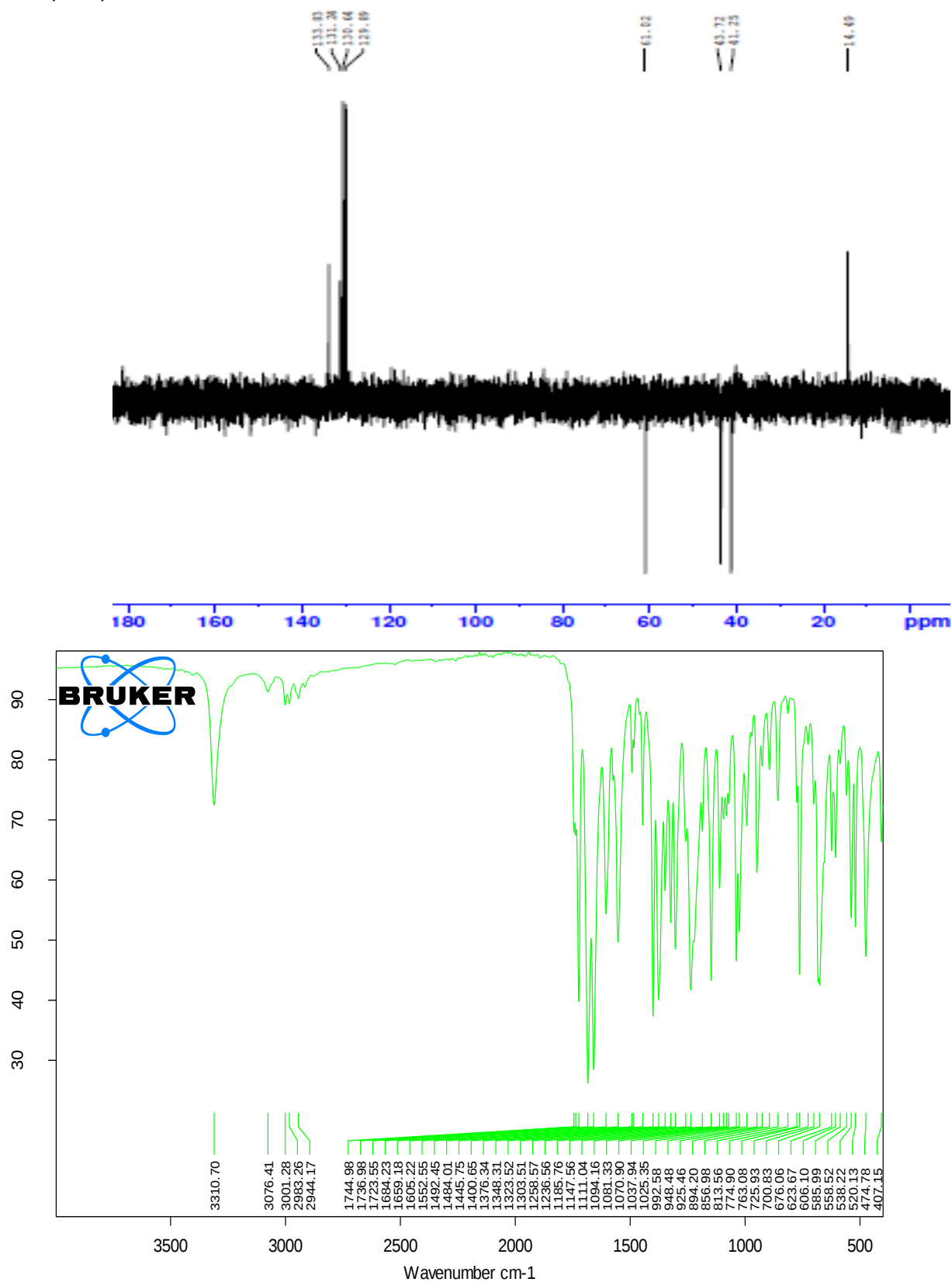
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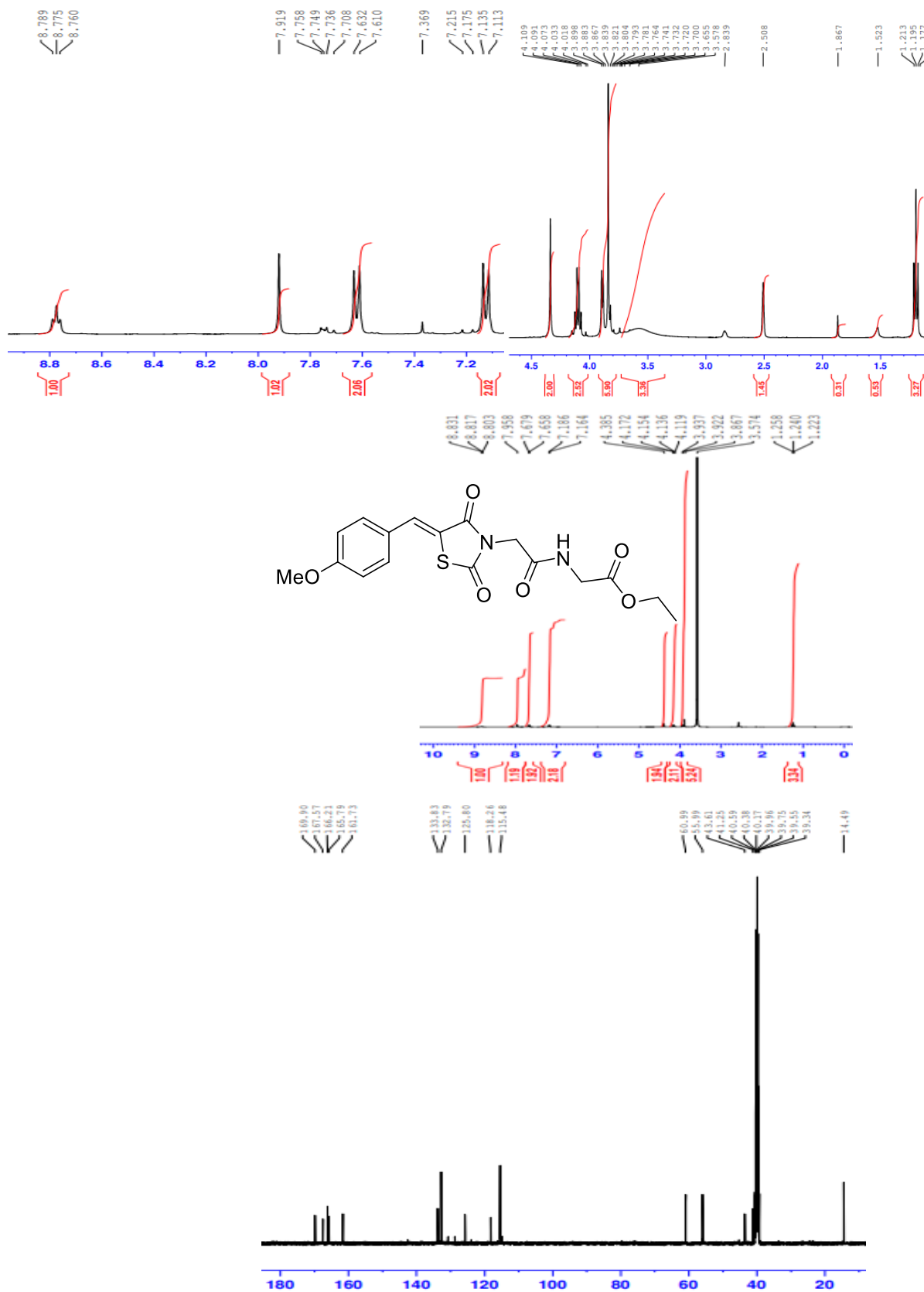
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(13ai)

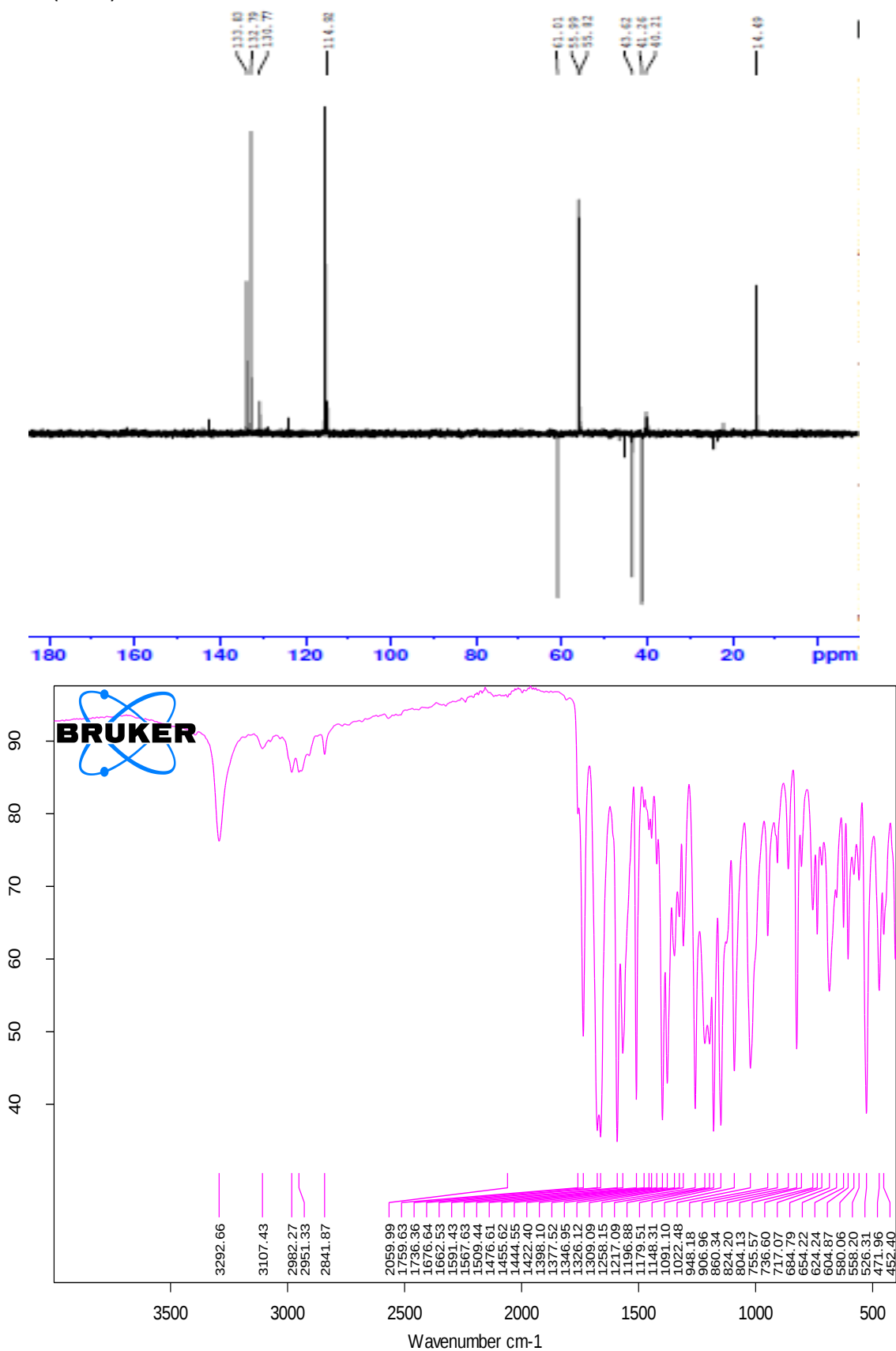


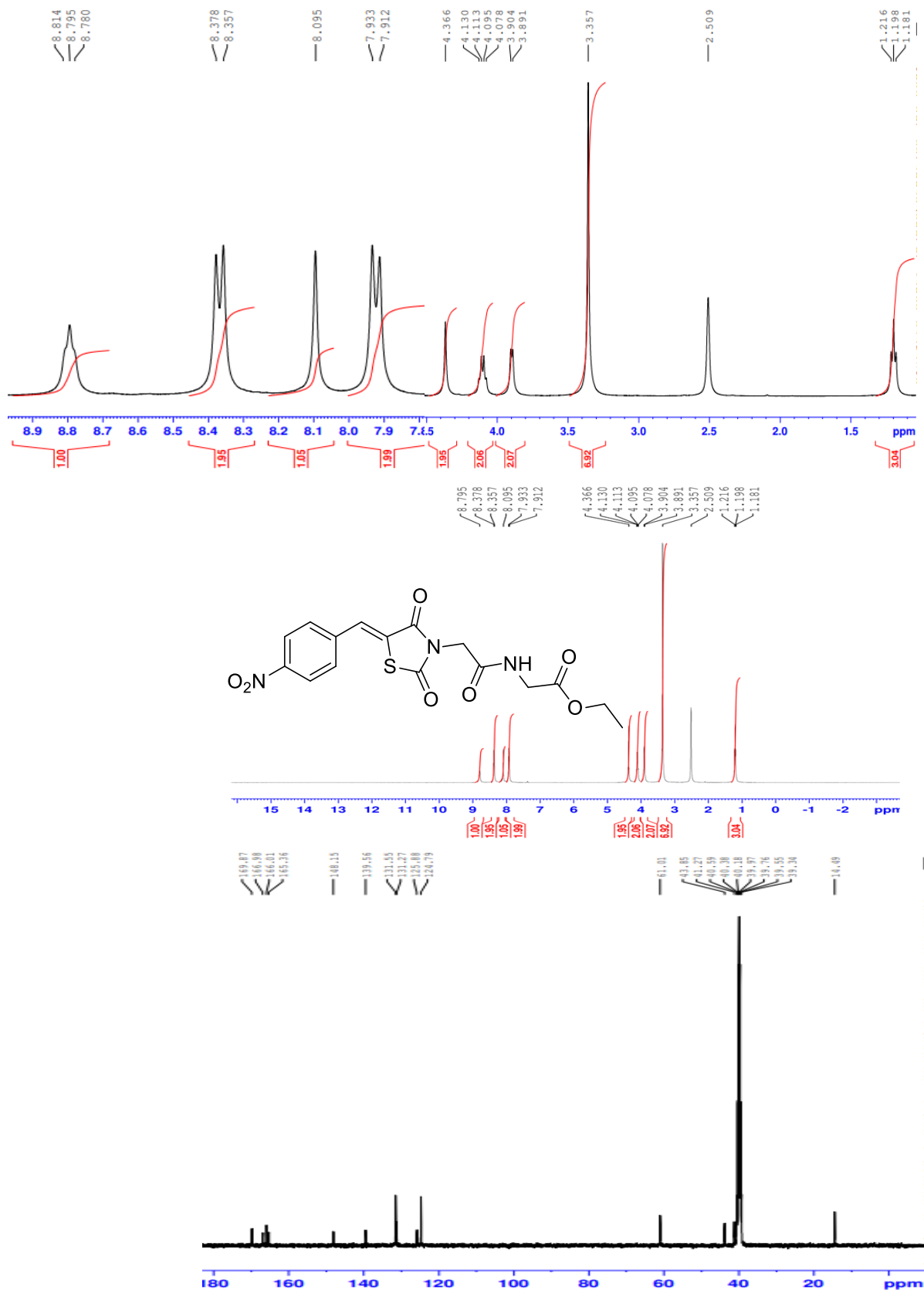
S16. DEPT-135 and IR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido) glycinate (13ai)



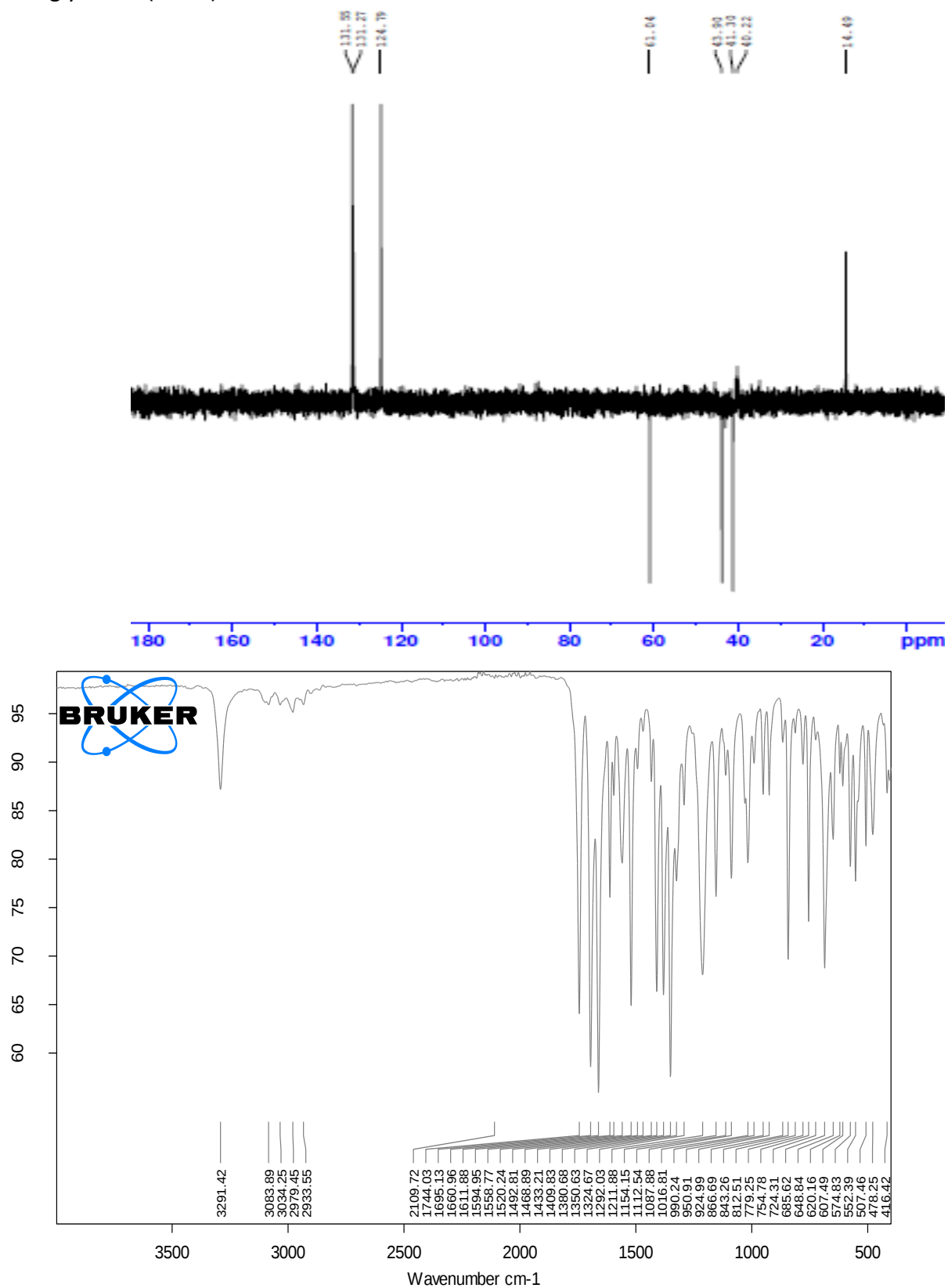
S17.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) glycinate (**13aii**)

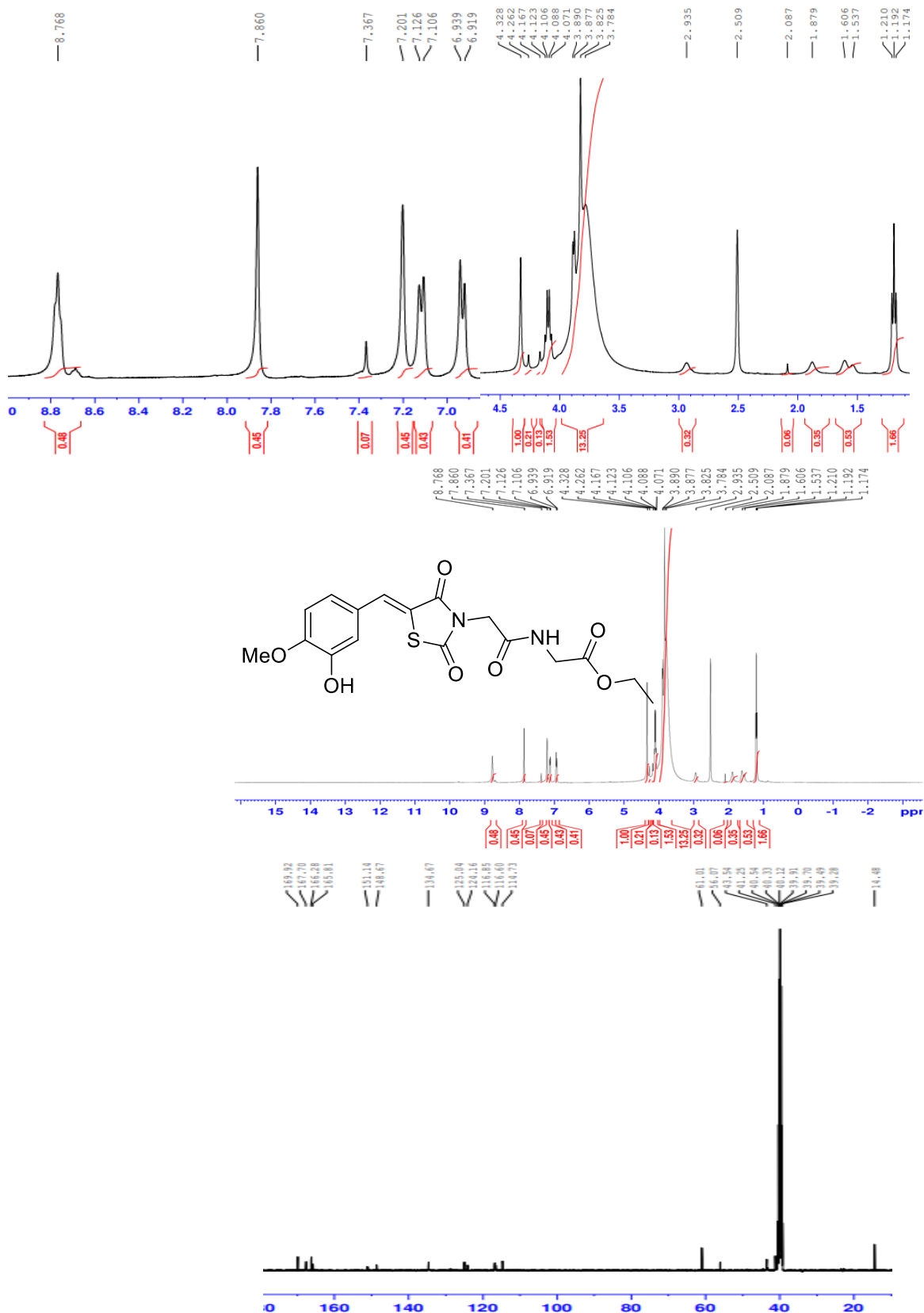
S18. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3yl) acetamido) glycinate (**13aii**)



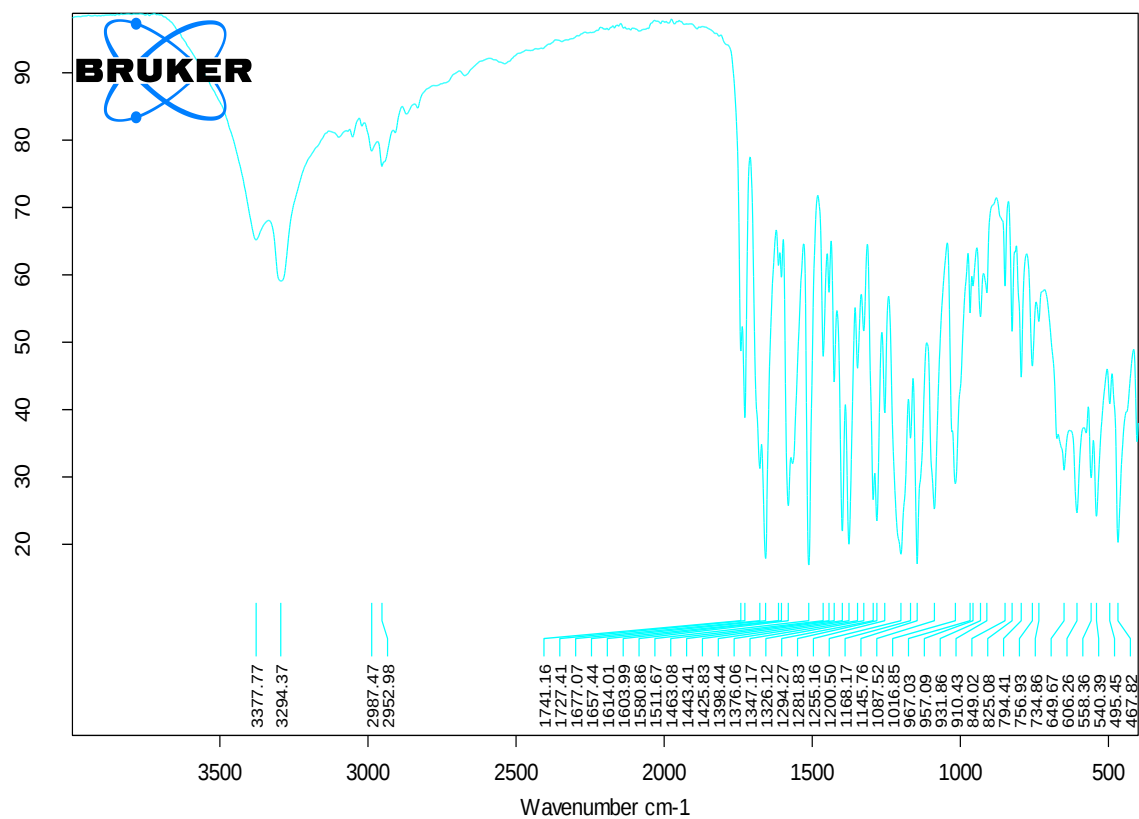
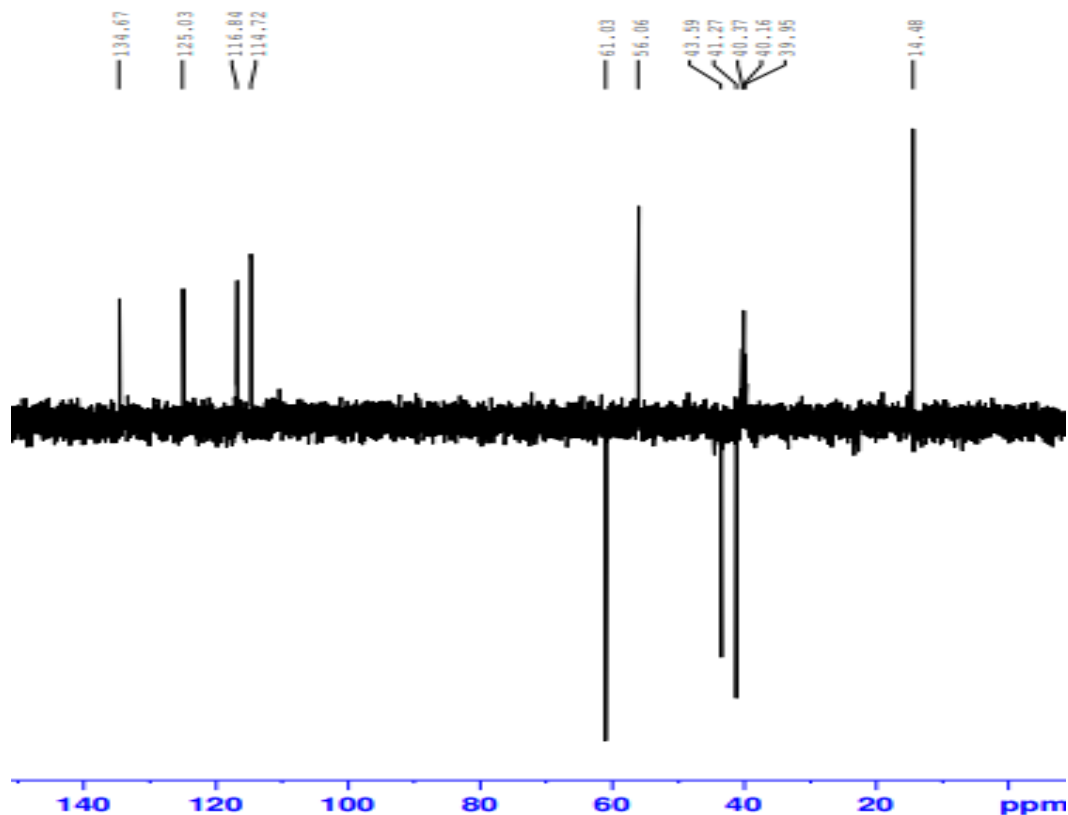
S19.  $^1\text{H}$  and  $^{13}\text{C}$  NMR of Ethyl 2-(2-(5-(4-nitrobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) glycinate (13aiii)

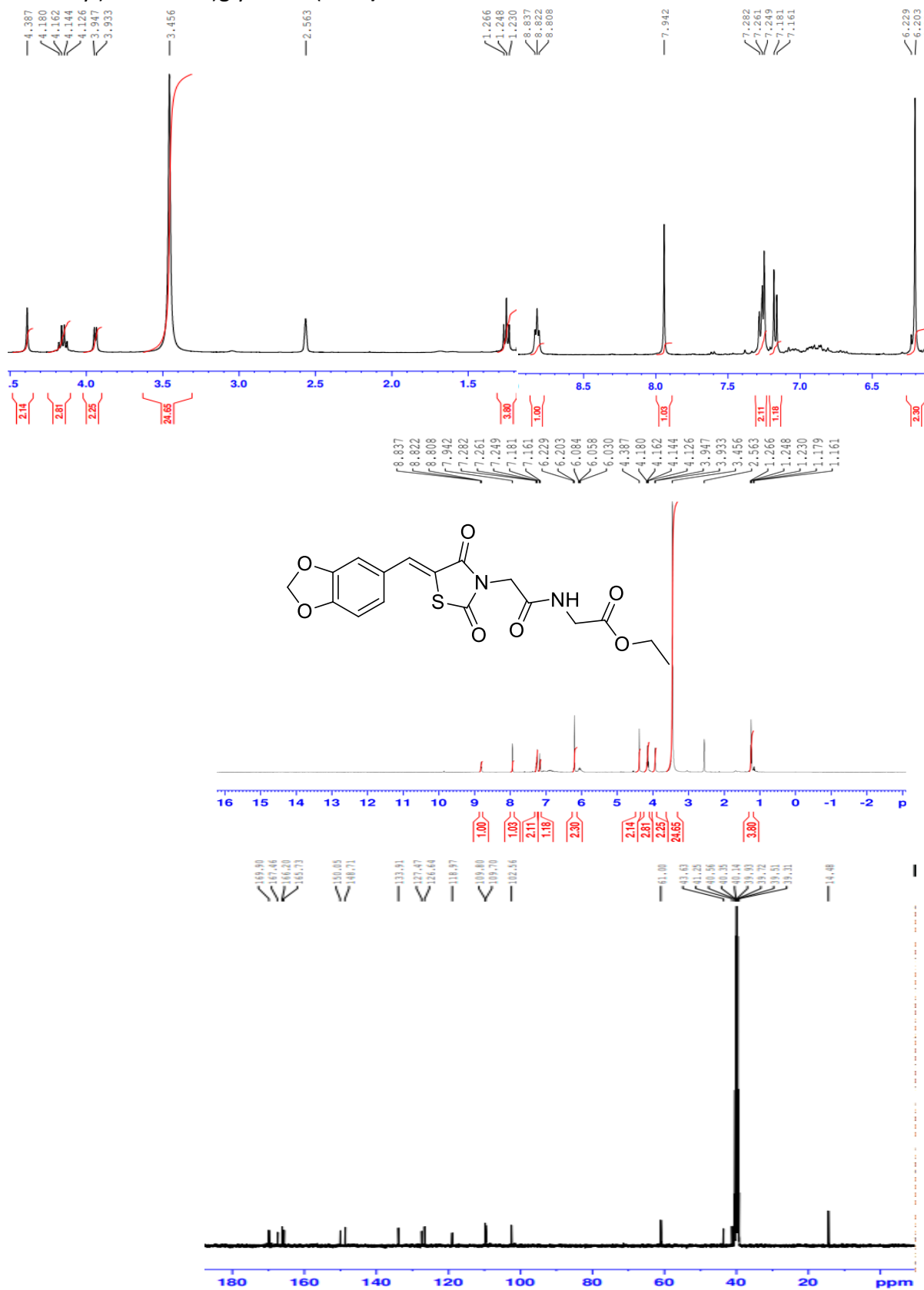
S20. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-nitrobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) glycinate (**13aiii**)

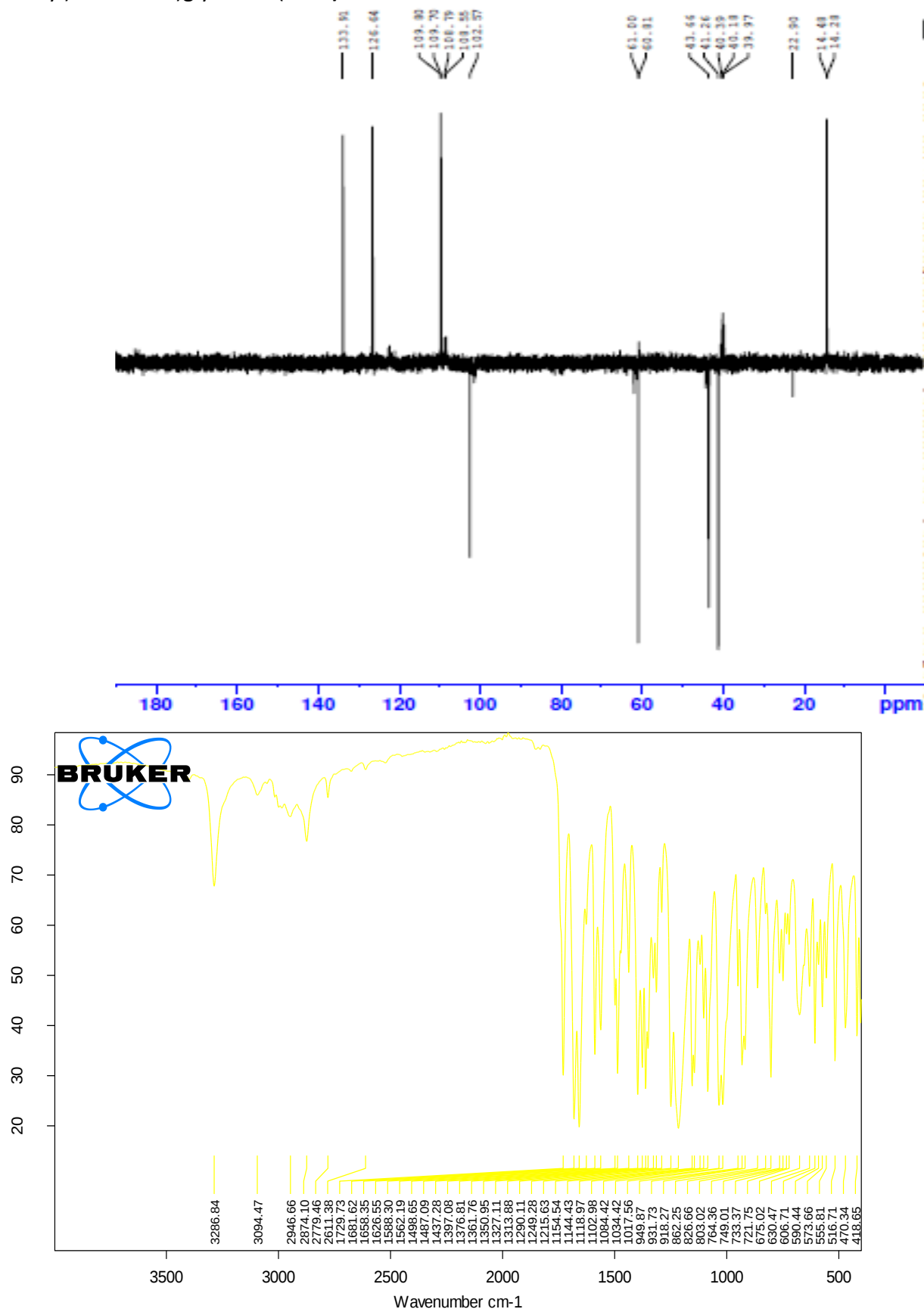


S21.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(3-hydroxy-4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido) glycinate (**13aiv**)

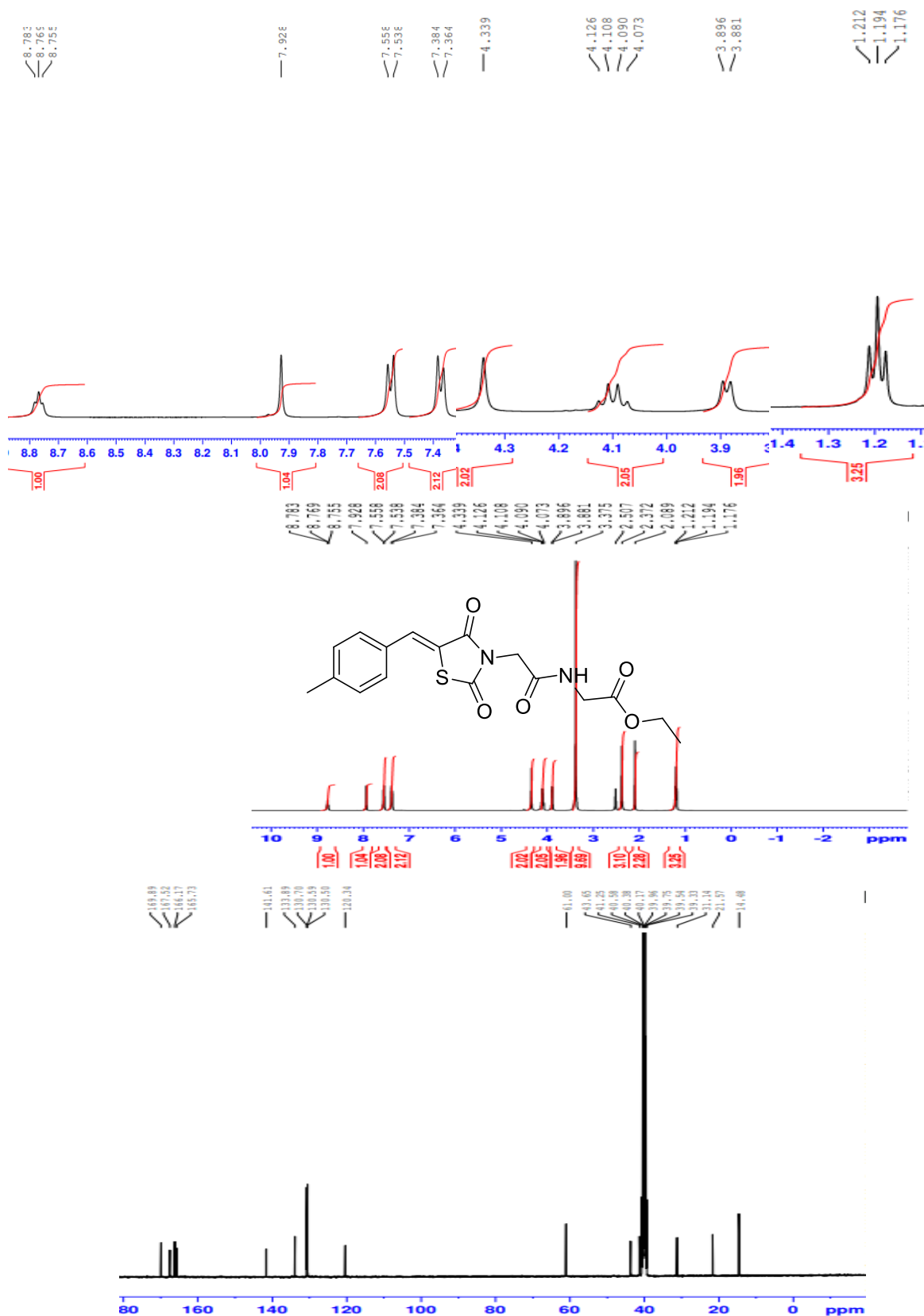
S22. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(3-hydroxy-4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido) glycinate (**13aiv**)



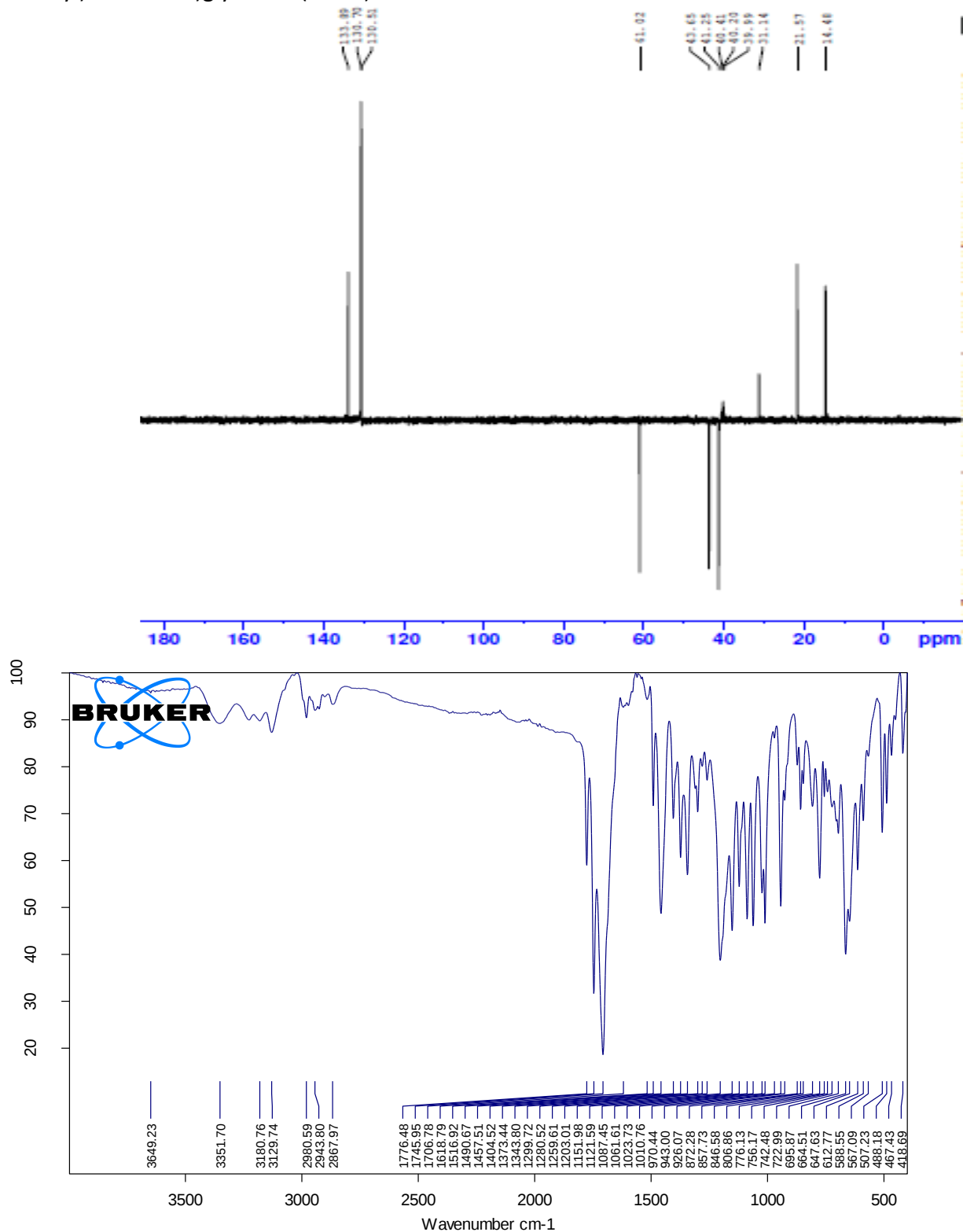
S23.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(Benzo[d][1,3] dioxol-5-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)glycinate (**13av**)

S24. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(Benzo[d][1,3] dioxol-5-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)glycinate (**13av**)

S25.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of ethyl 2-(2-(5-(4-methylbenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)glycinate (**13avi**)



S26. DEPT-135 and IR spectra of ethyl 2-(2-(5-(4-methylbenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)glycinate (**13avi**)

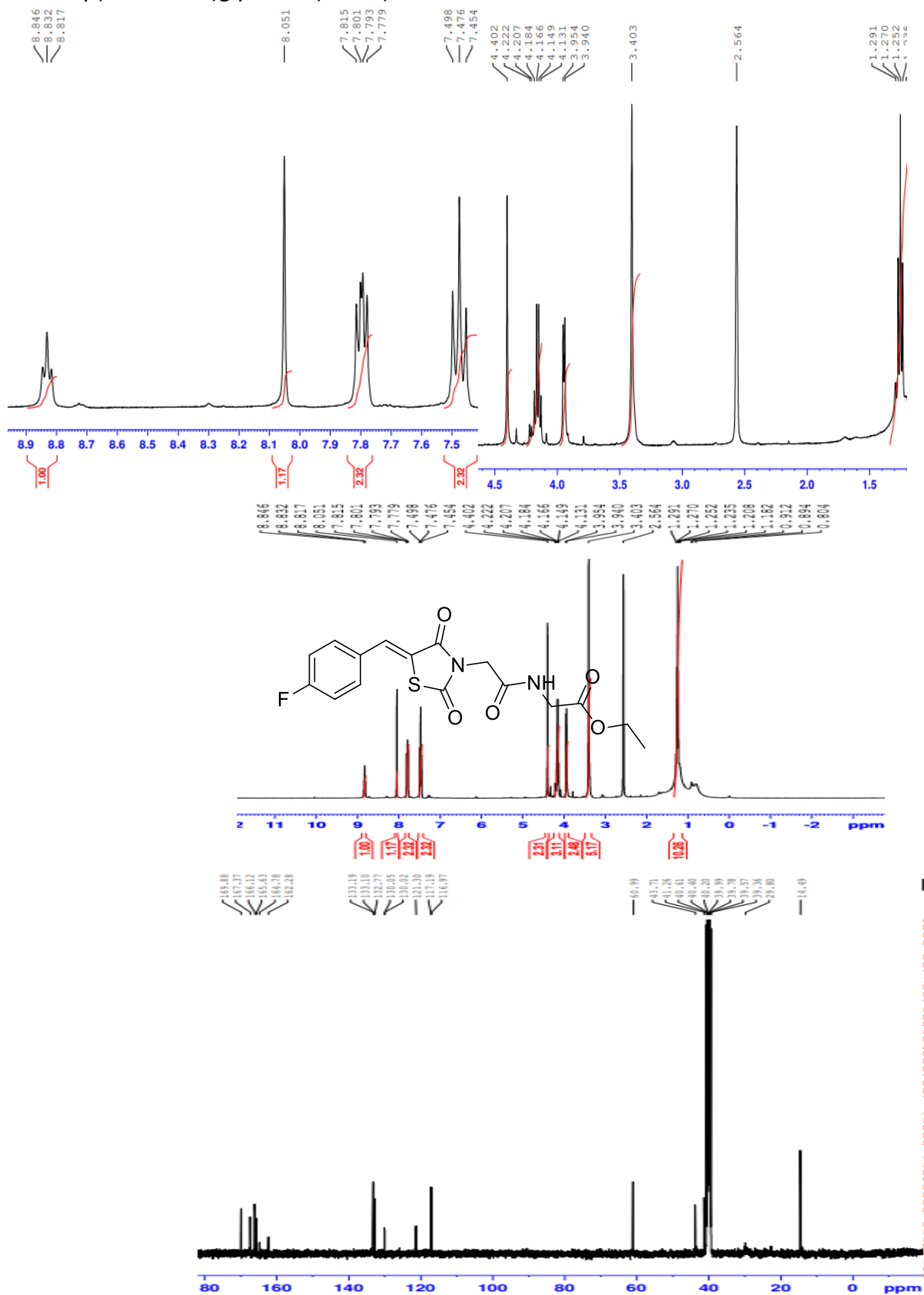


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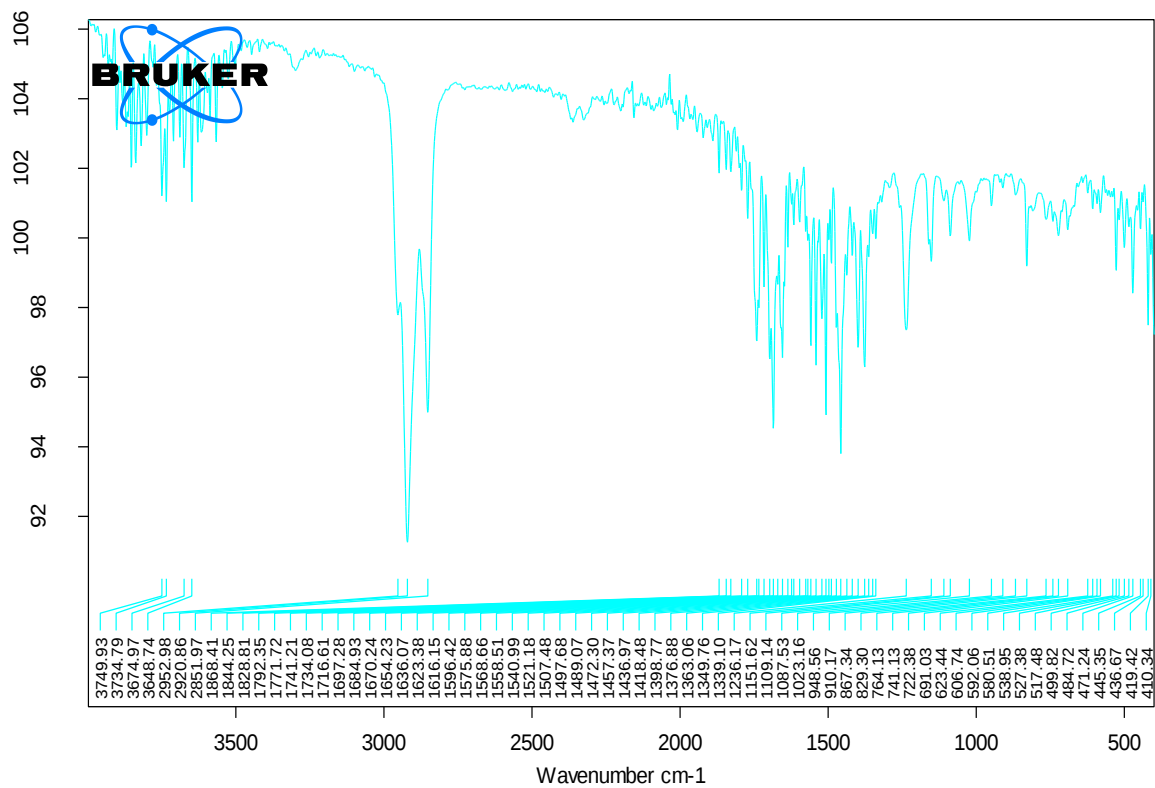
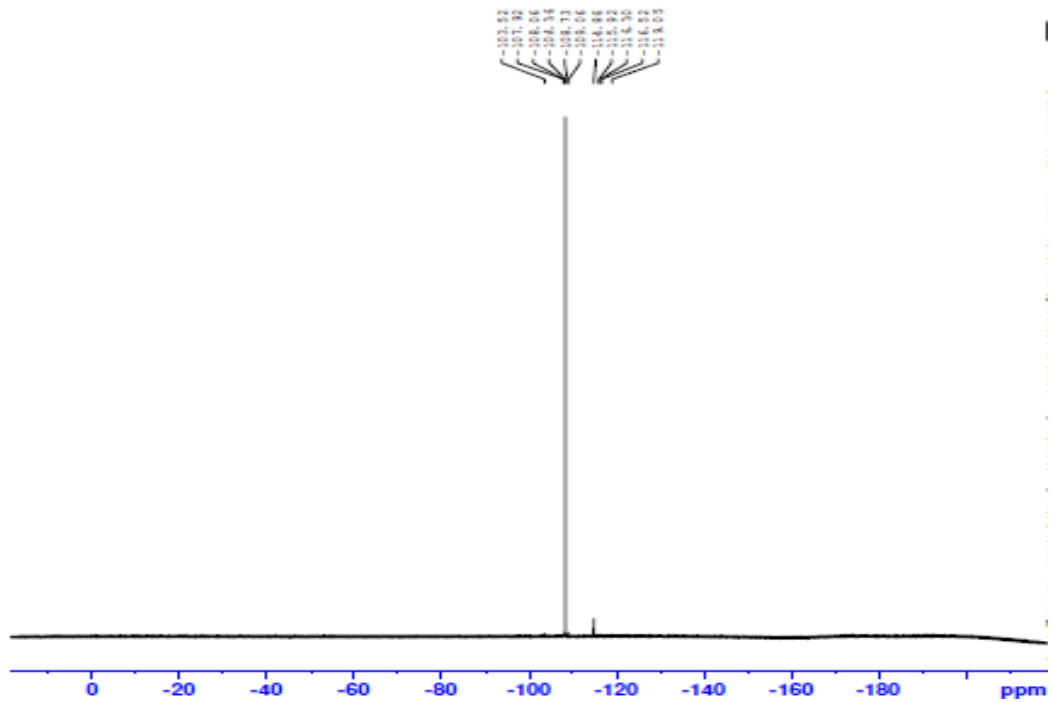
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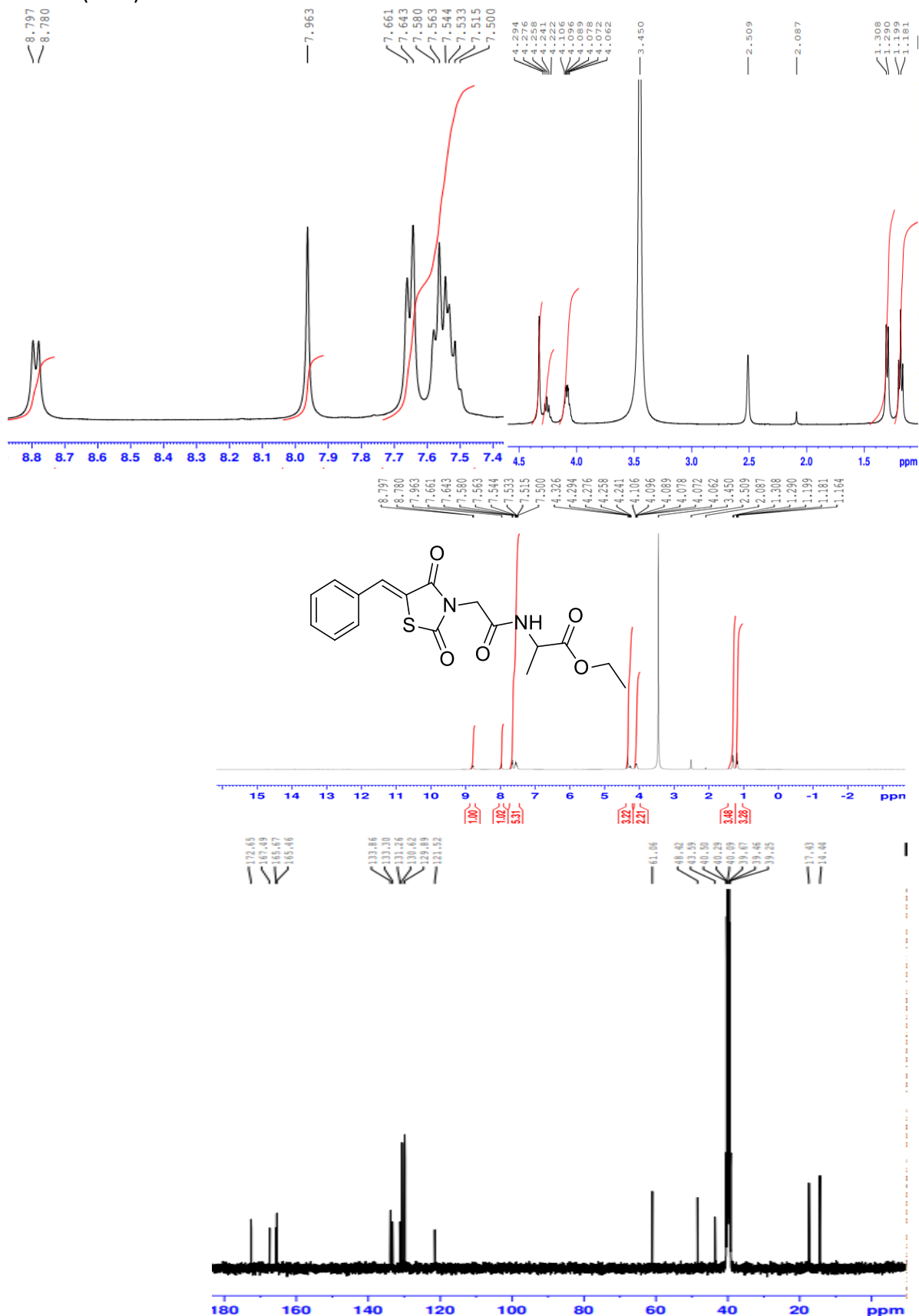
Instrument type and / or accessory

7/20/2020

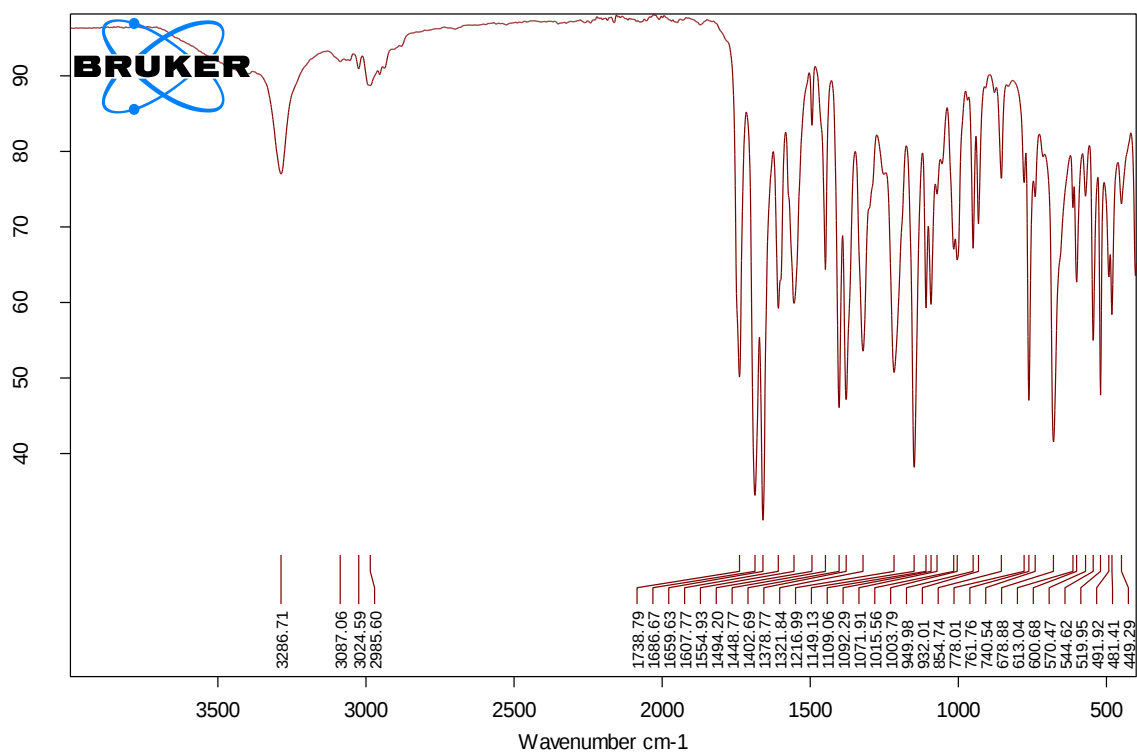
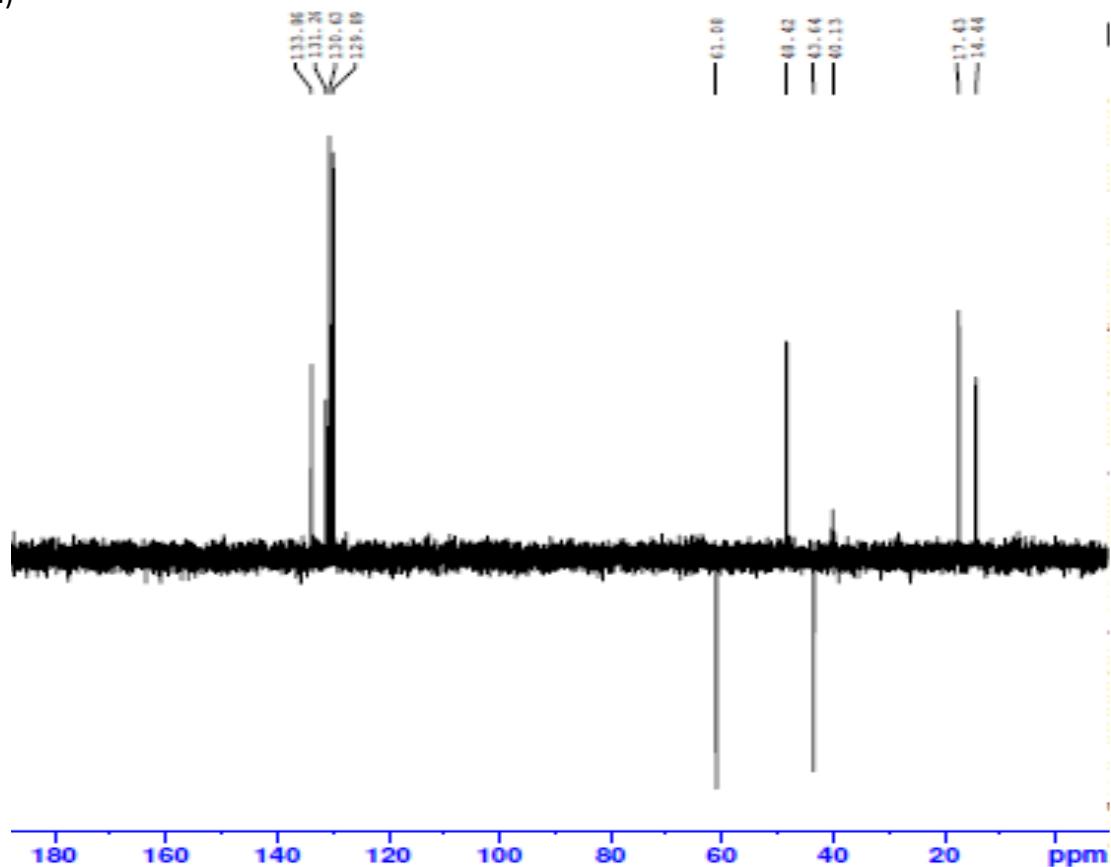
S27.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of ethyl 2-(2-(5-(4-Fluorobenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)glycinate (**13avii**)

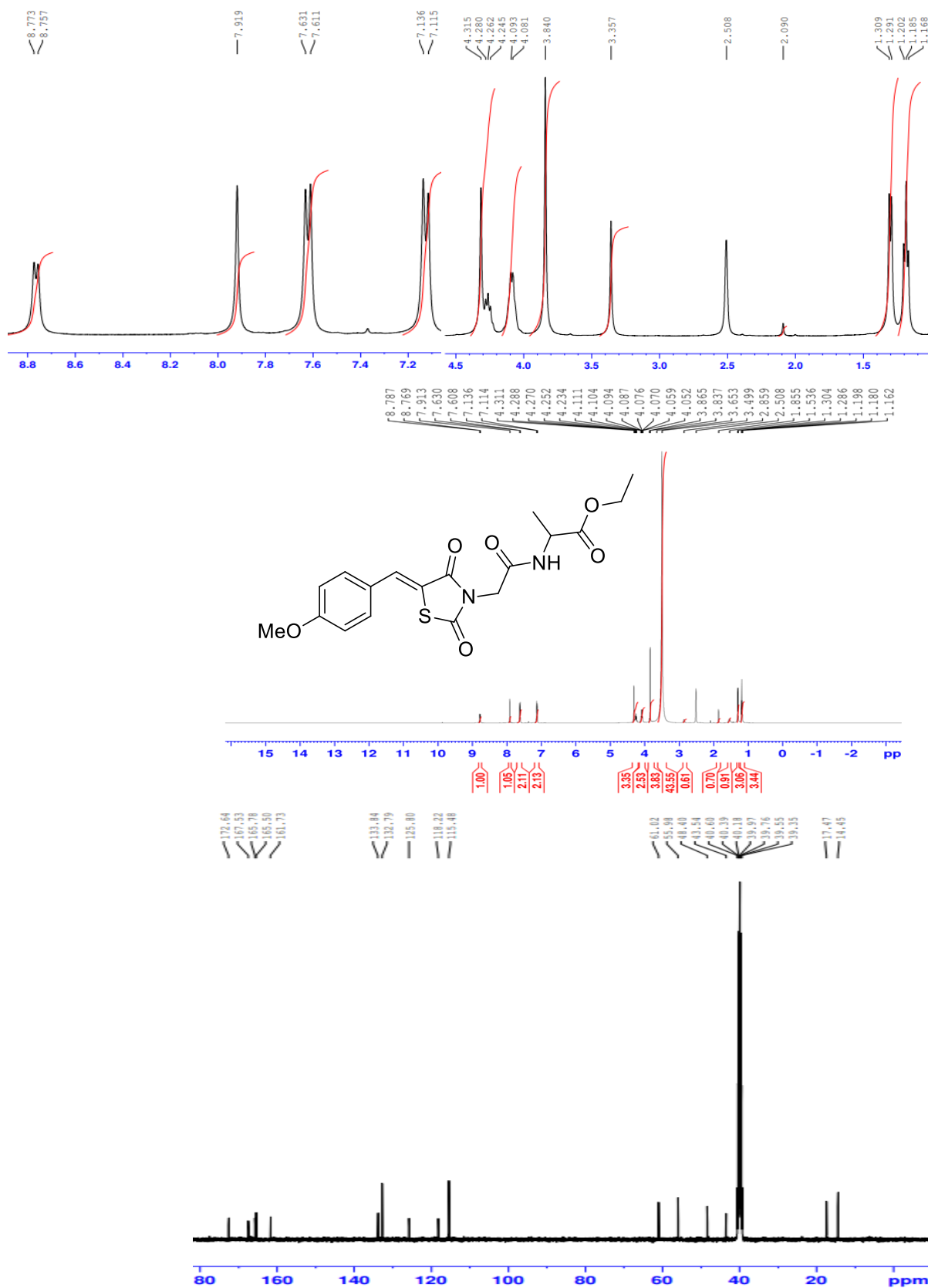
**(13avii)**



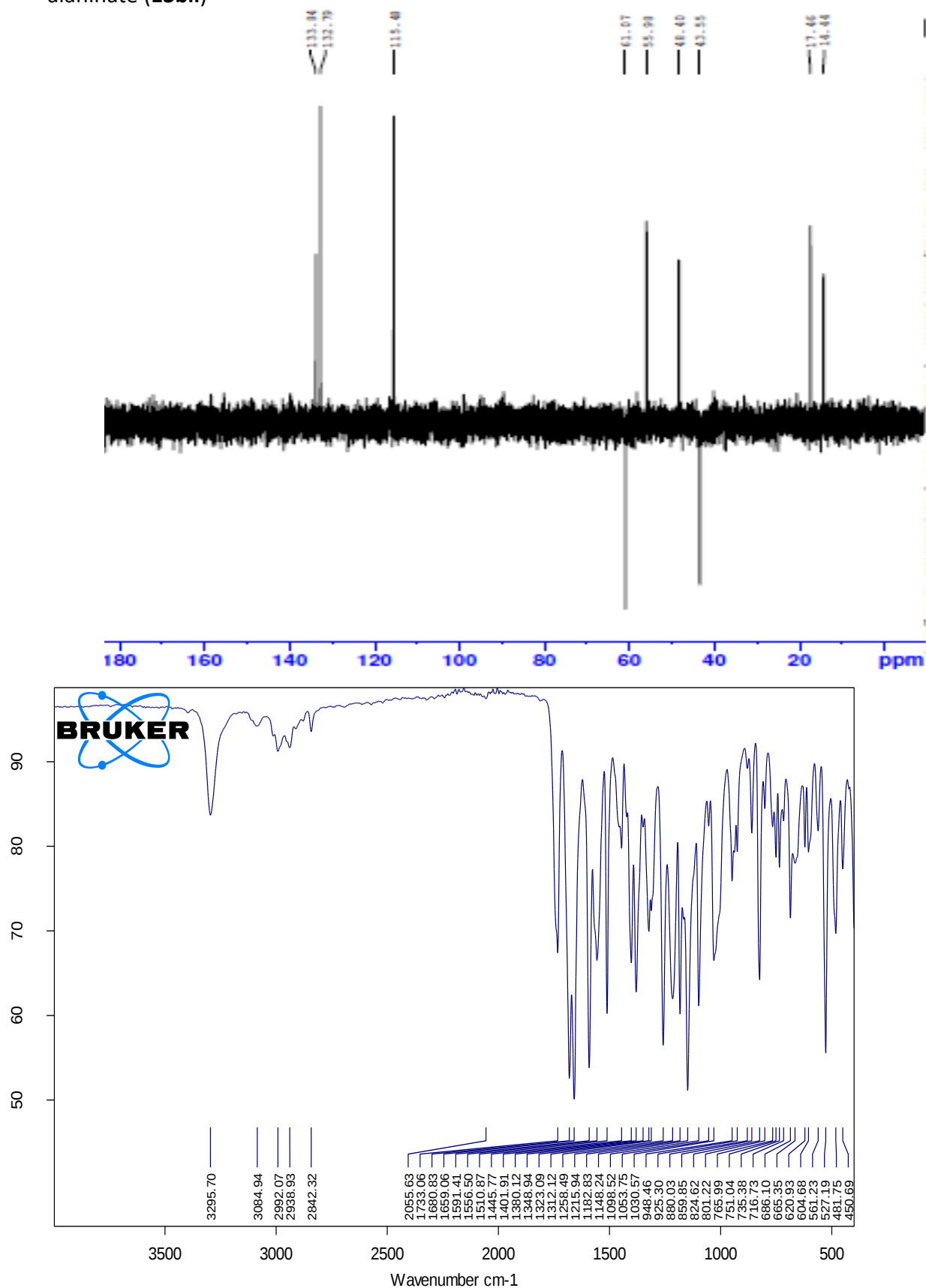
S29.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (13bi)

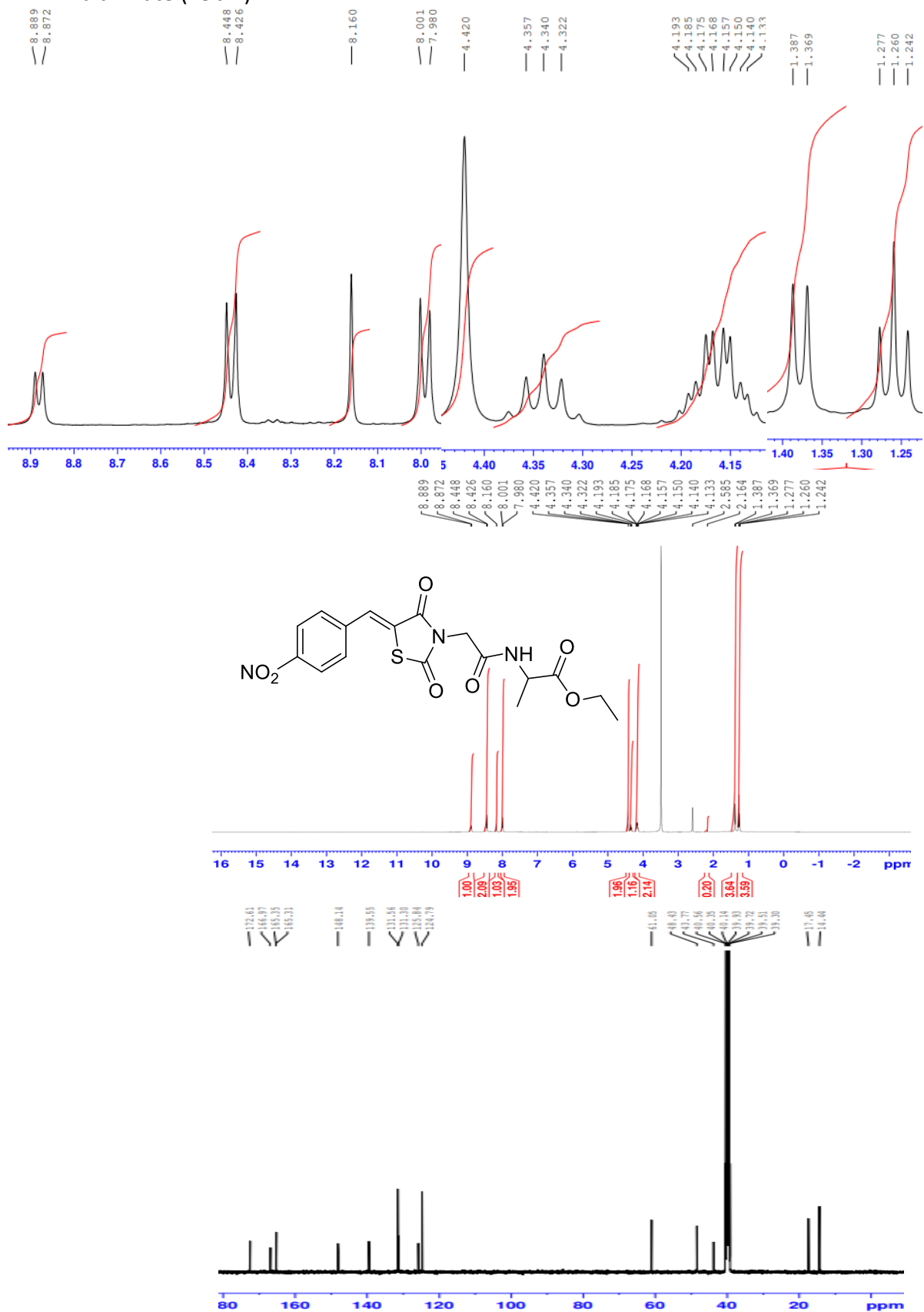
S30. DEPT-135 and IR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (13bi)



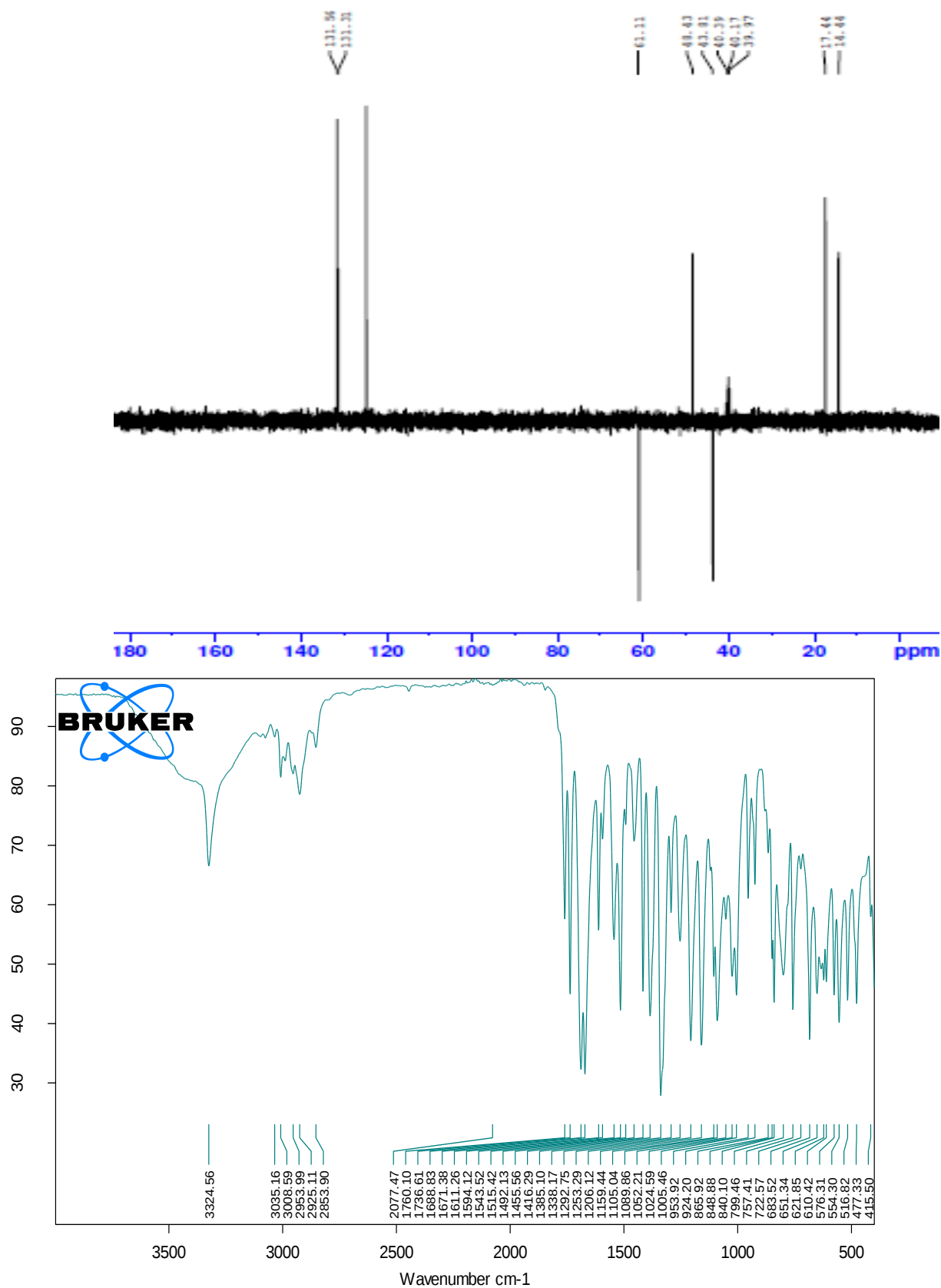
S31.  $^1\text{H}$  NMR and  $^{13}\text{C}$  Spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13bii**)

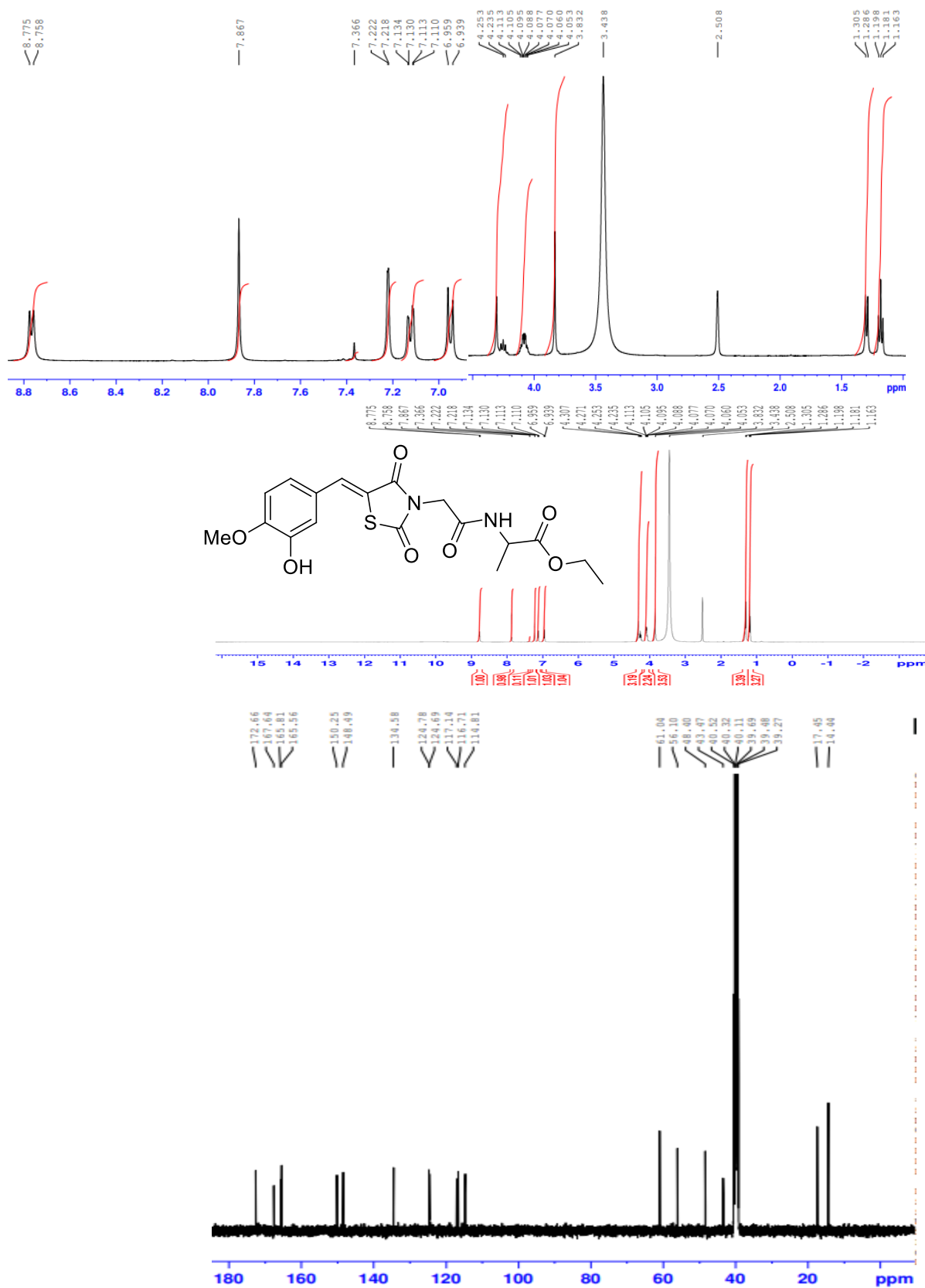
S32. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3yl) acetamido) alaninate (**13bii**)



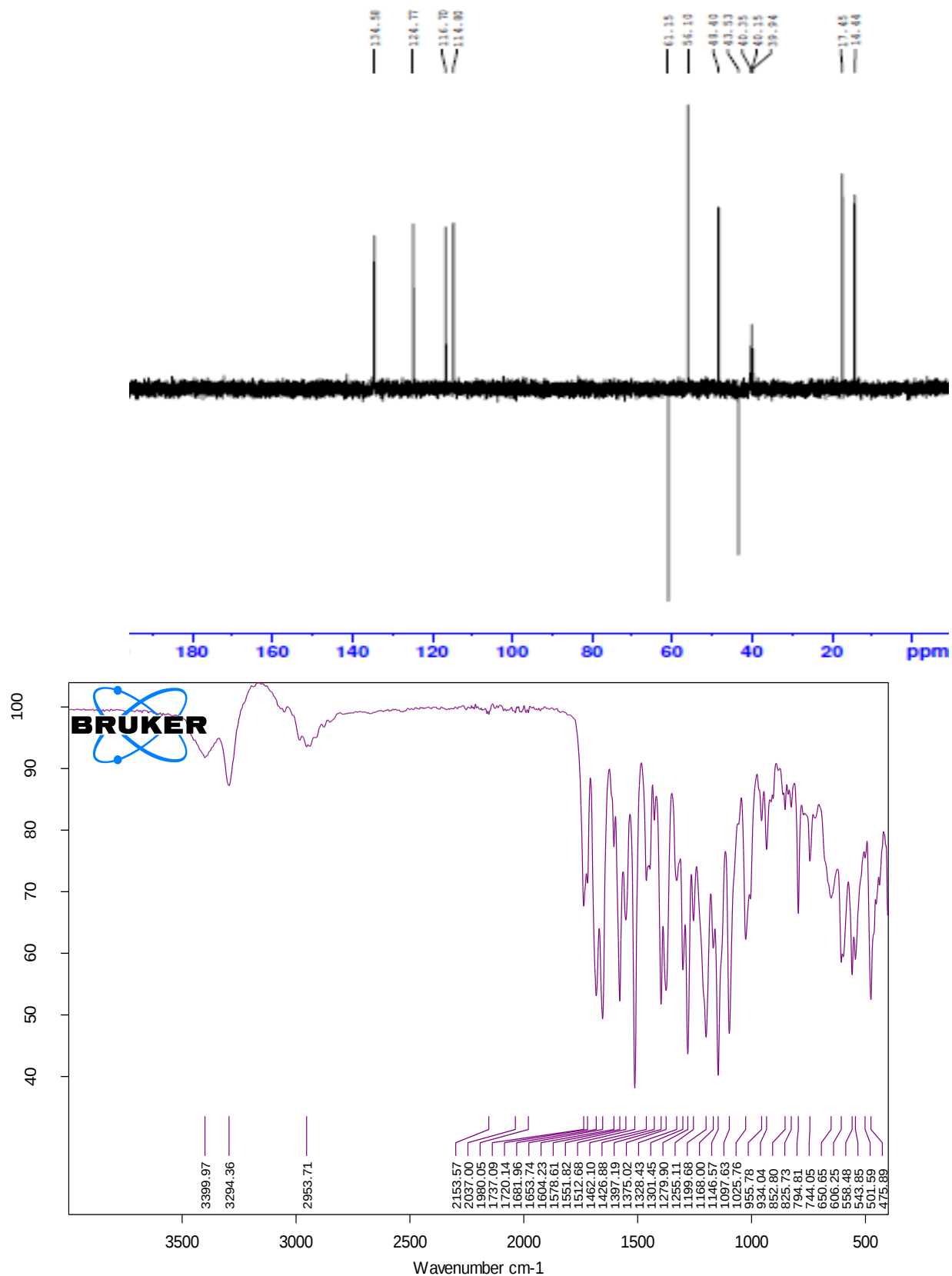
S33.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-nitrobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13biii**)

S34. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-nitrobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13biii**)

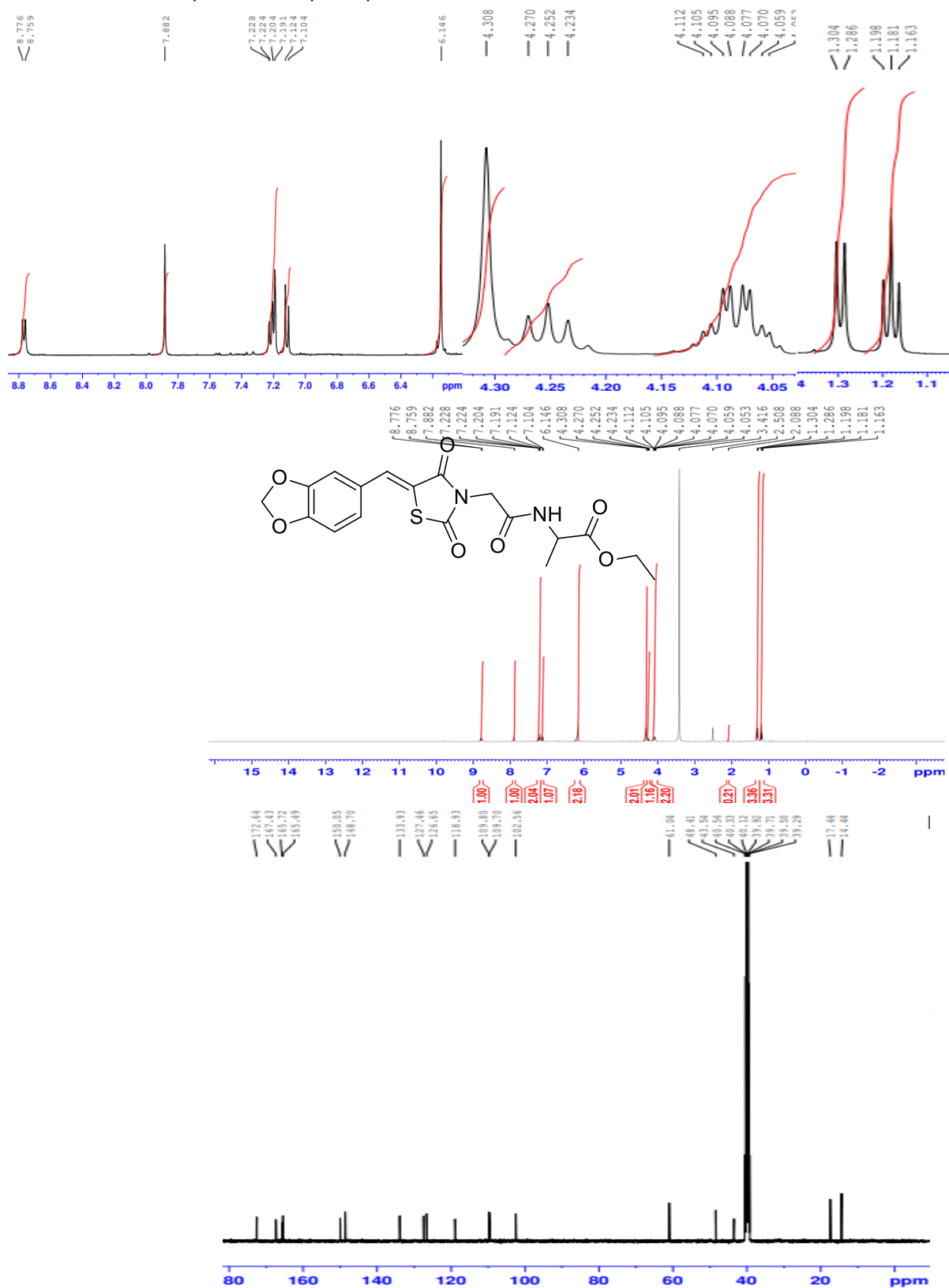


S35.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(3-hydroxy-4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido) alaninate (**13biv**)

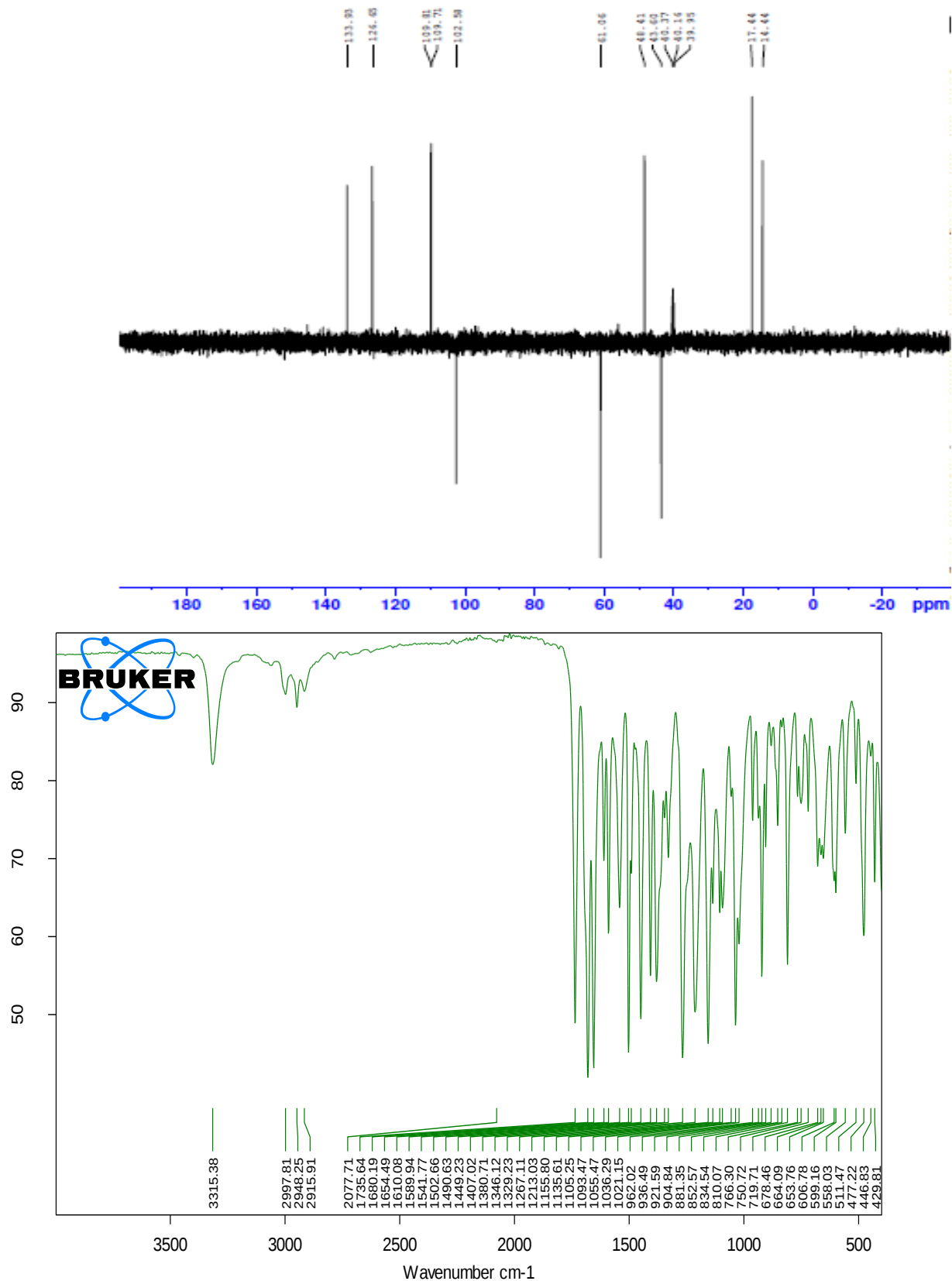
S36. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(3-hydroxy-4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido) alaninate (**13biv**)

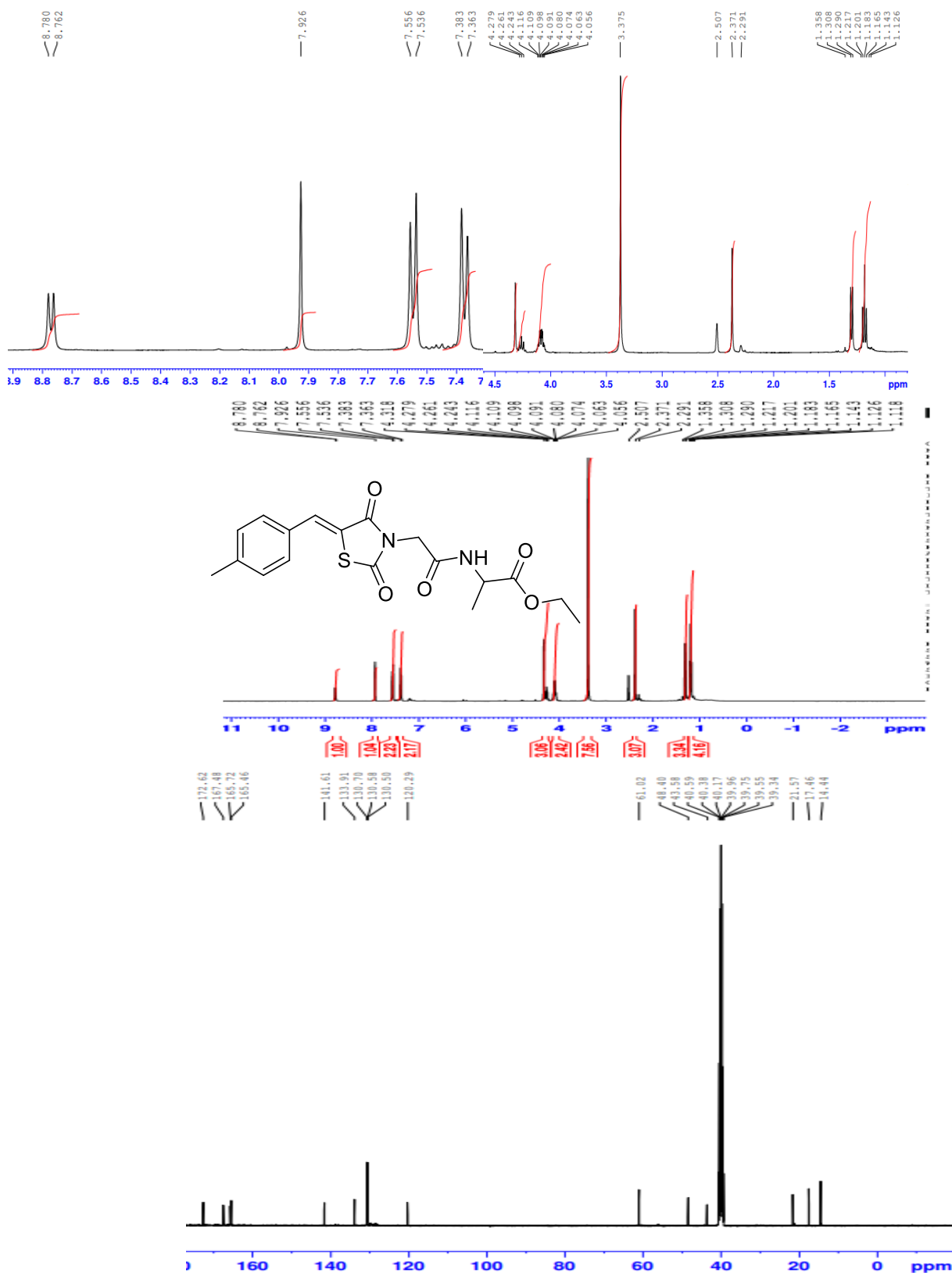


S37.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(benzo[d][1,3]dioxol-5-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido) alaninate (**13bv**)

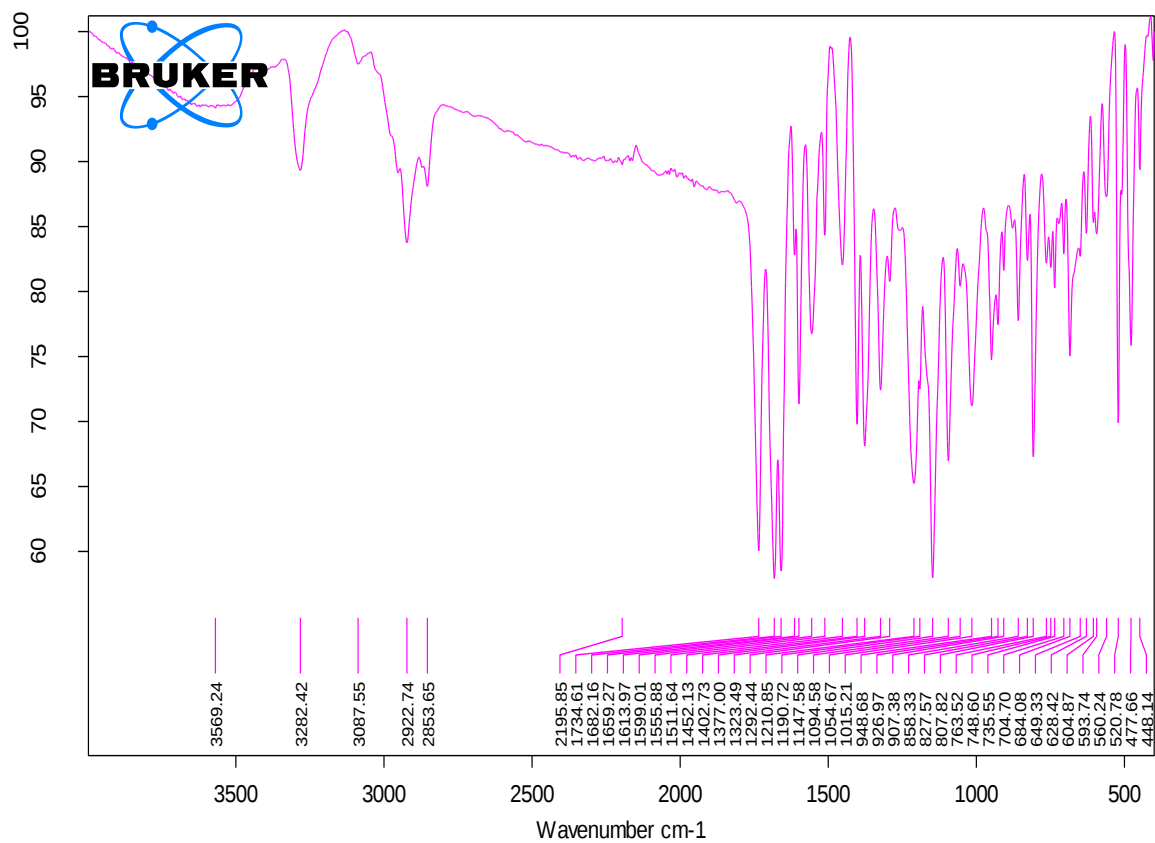
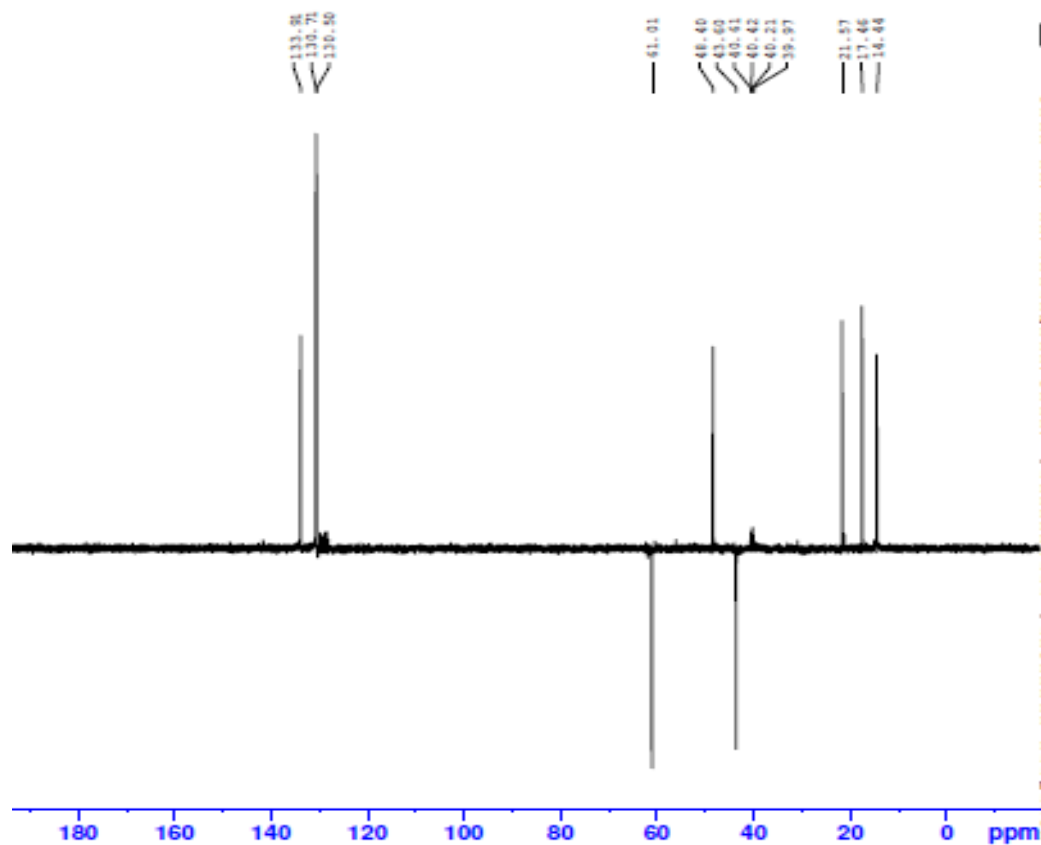


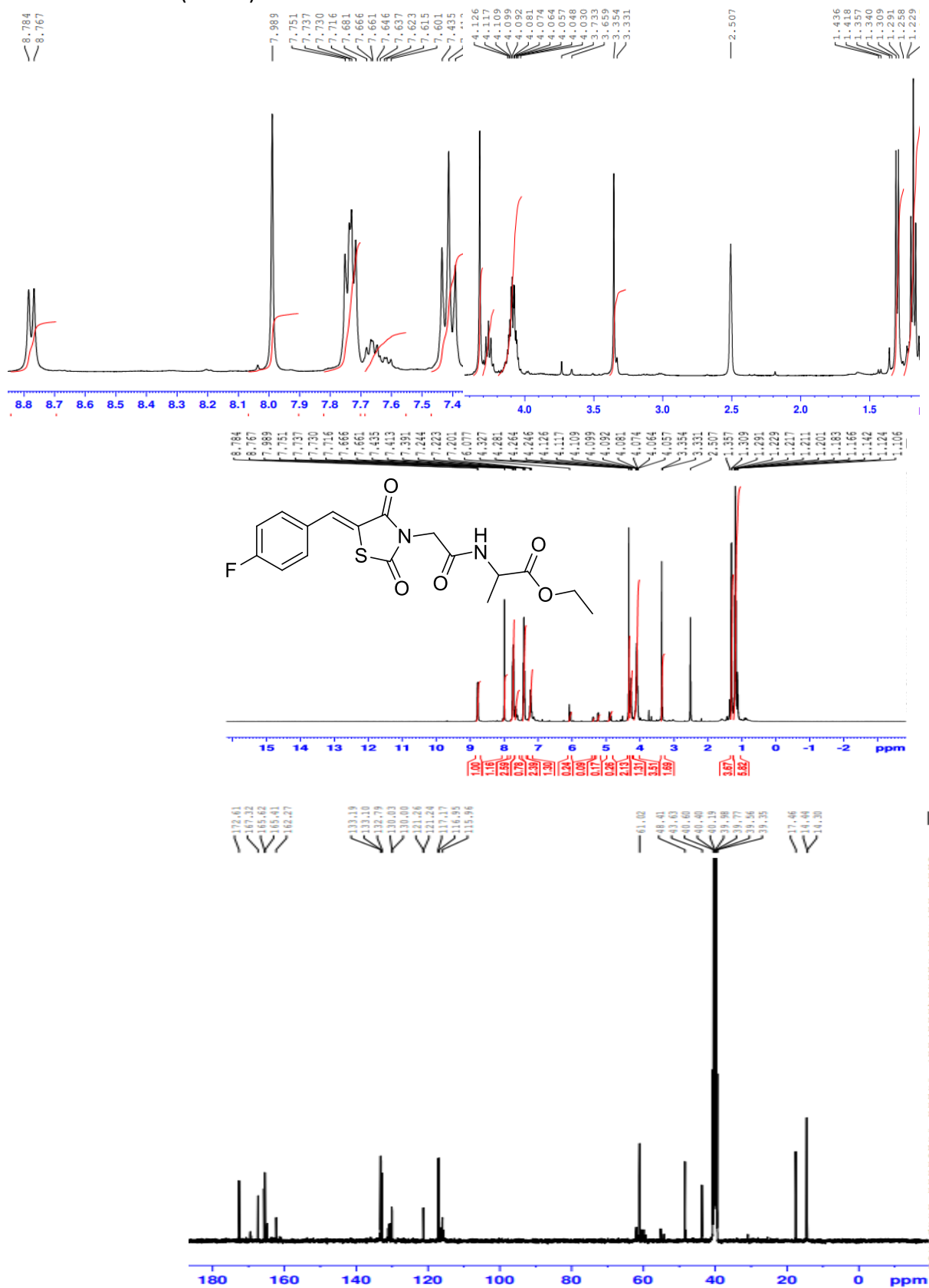
S38. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(benzo[d][1,3] dioxol-5-yl)methylene)-2,4-dioxothiazolidin-3-yl) acetamido alaninate (**13bv**)



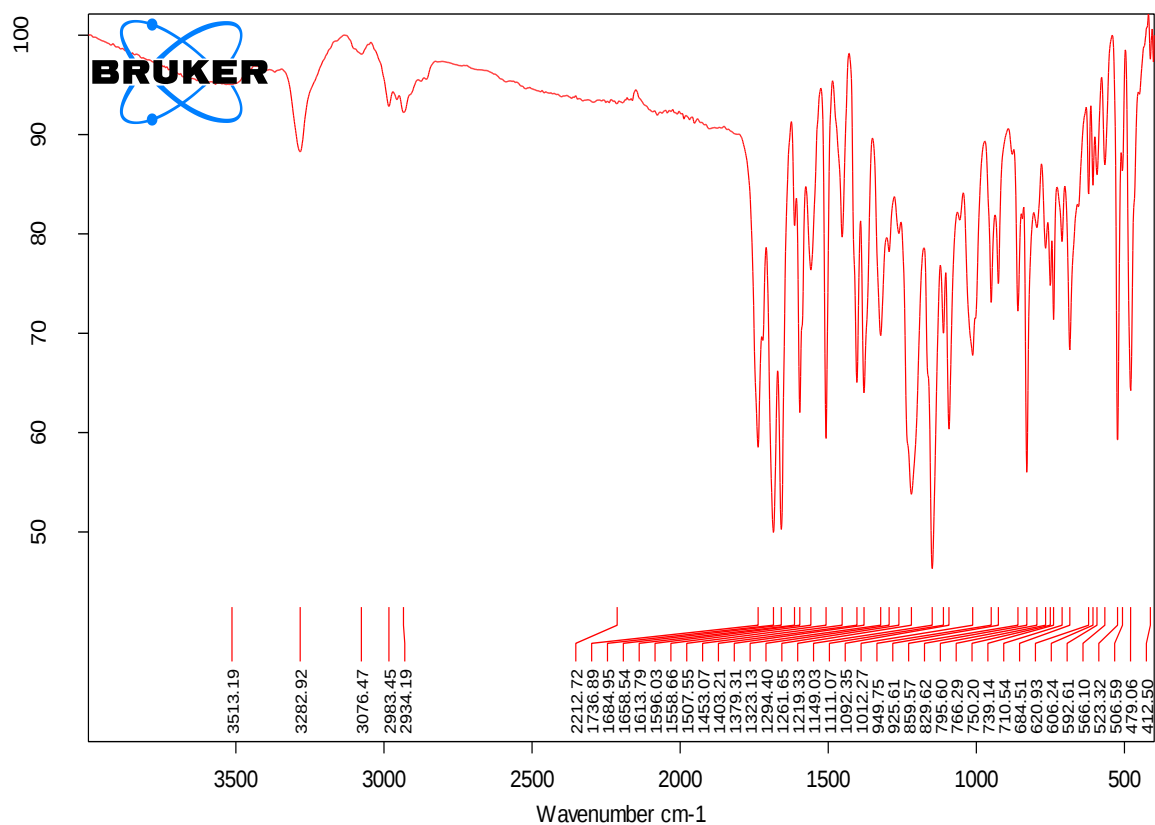
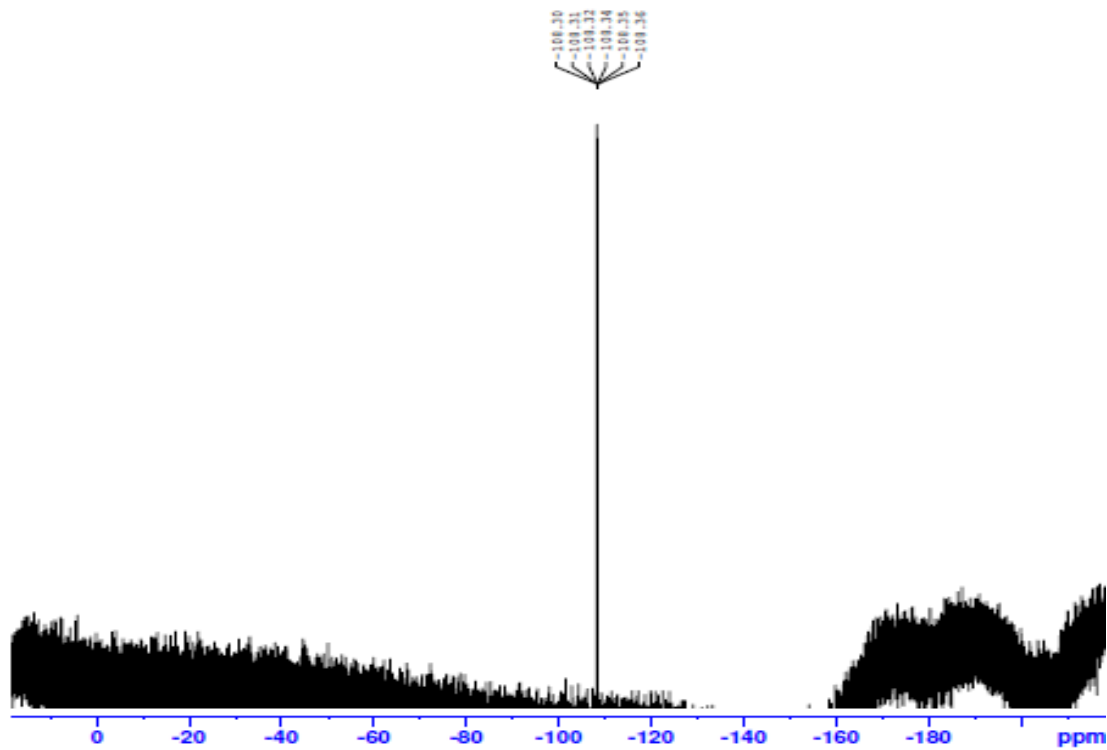
S39.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methylbenzylidene)-2,4dioxothiazolidin-3-yl) acetamido) alaninate (**13bvi**)

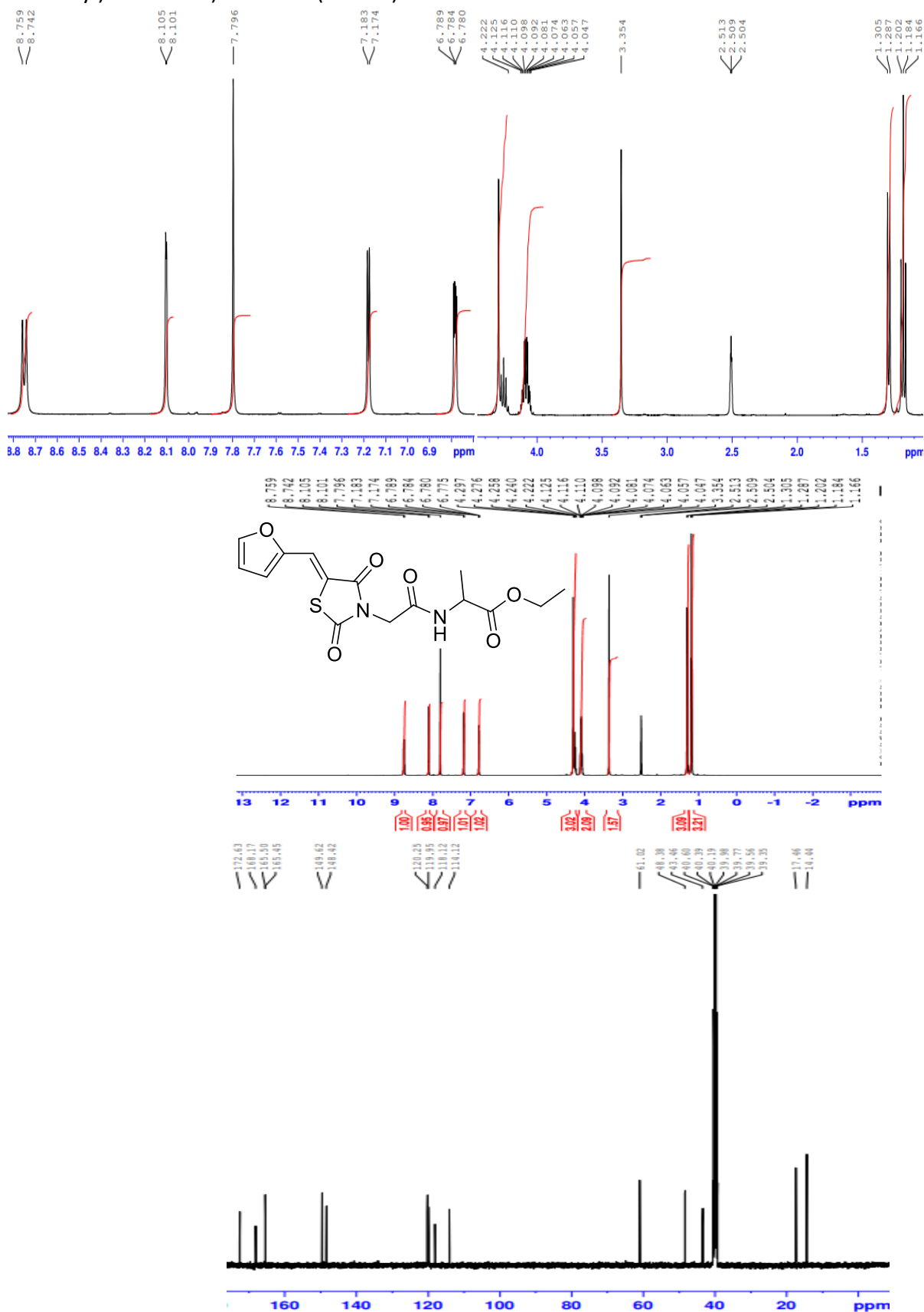
S40. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methylbenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13bvi**)



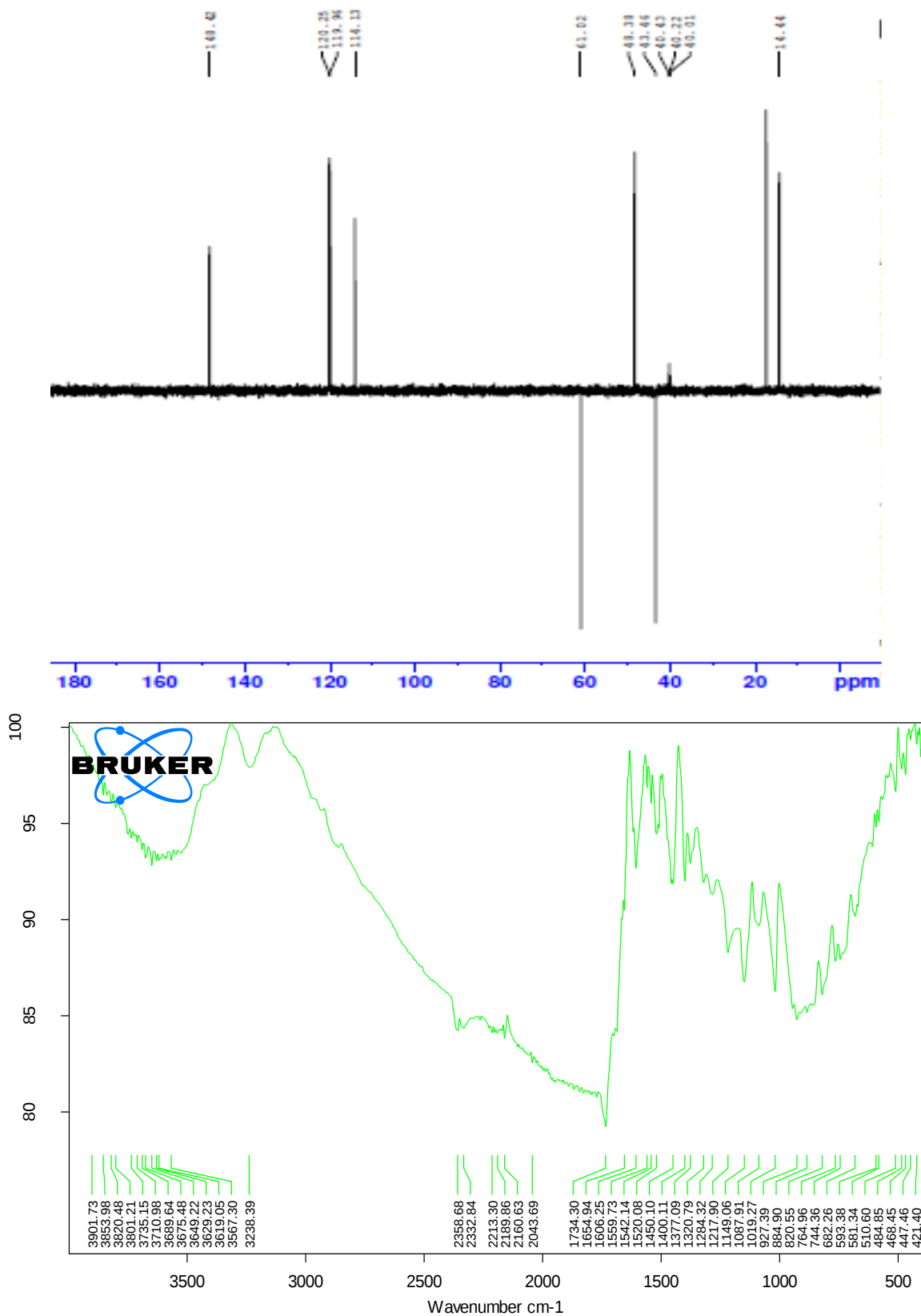
S41.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-fluorobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13bvii**)

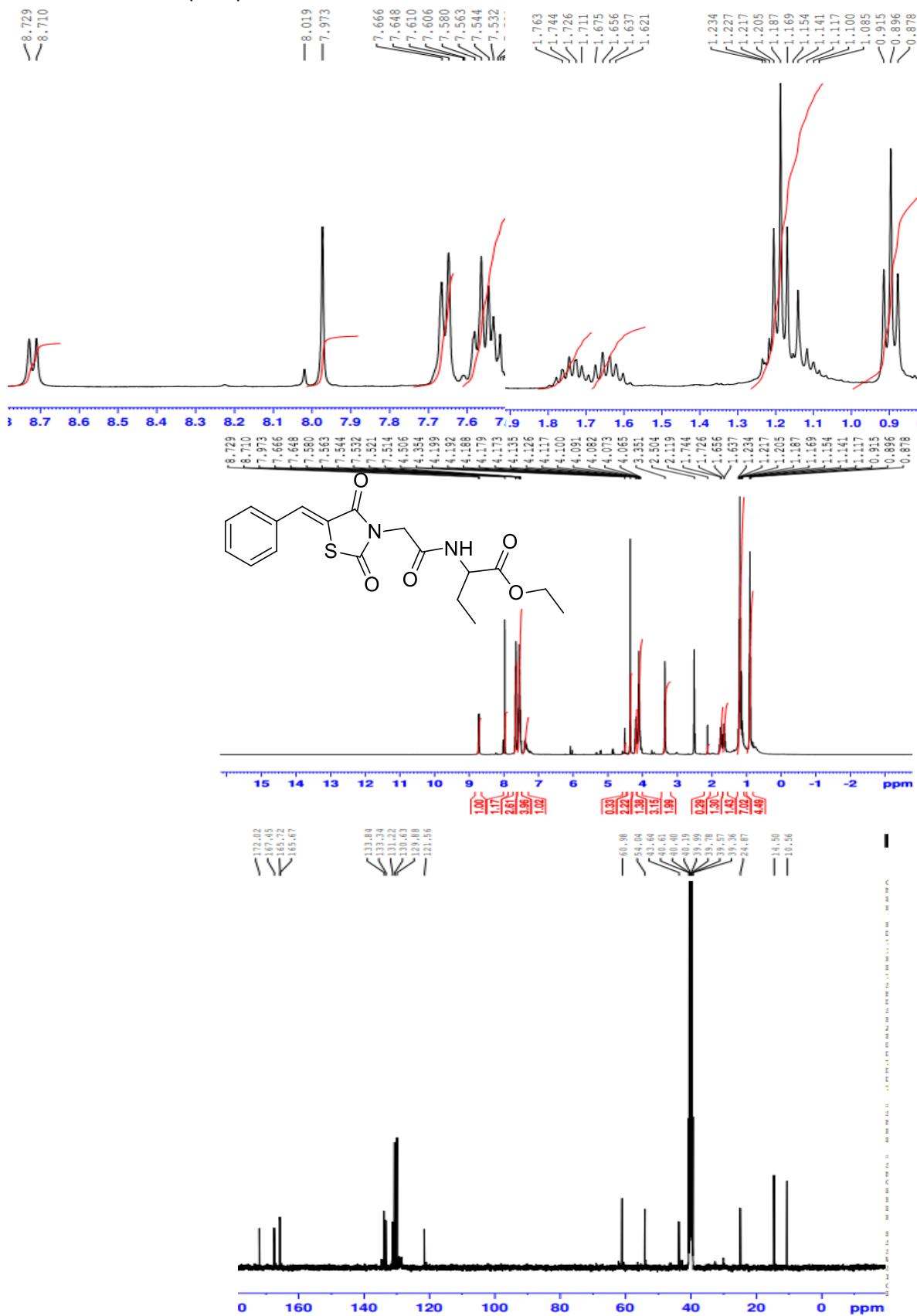
S42.  $^{19}\text{F}$  and IR spectra of Ethyl 2-(2-(5-(4-fluorobenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) alaninate (**13bvii**)



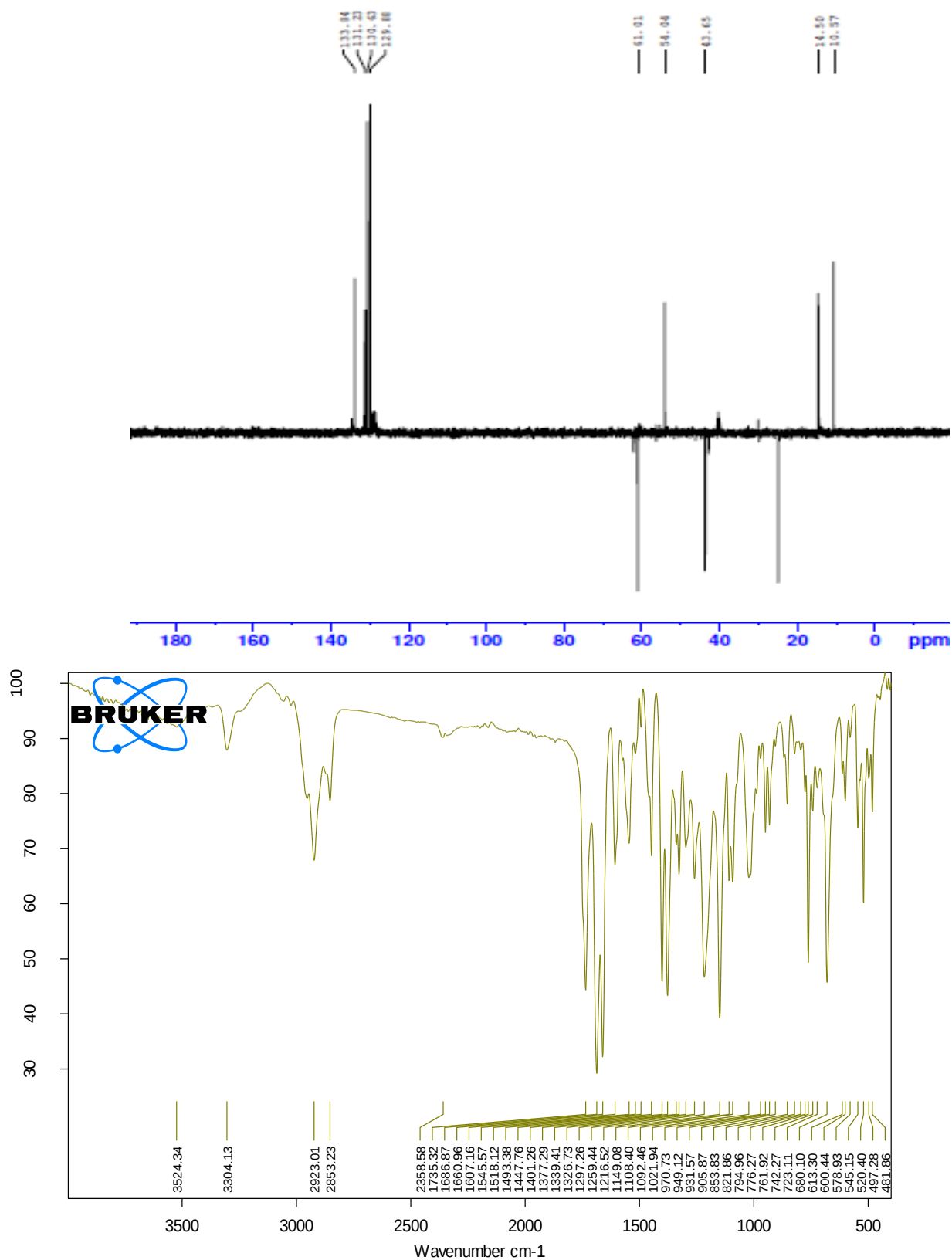
S43.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)alaninate (**13bviii**)

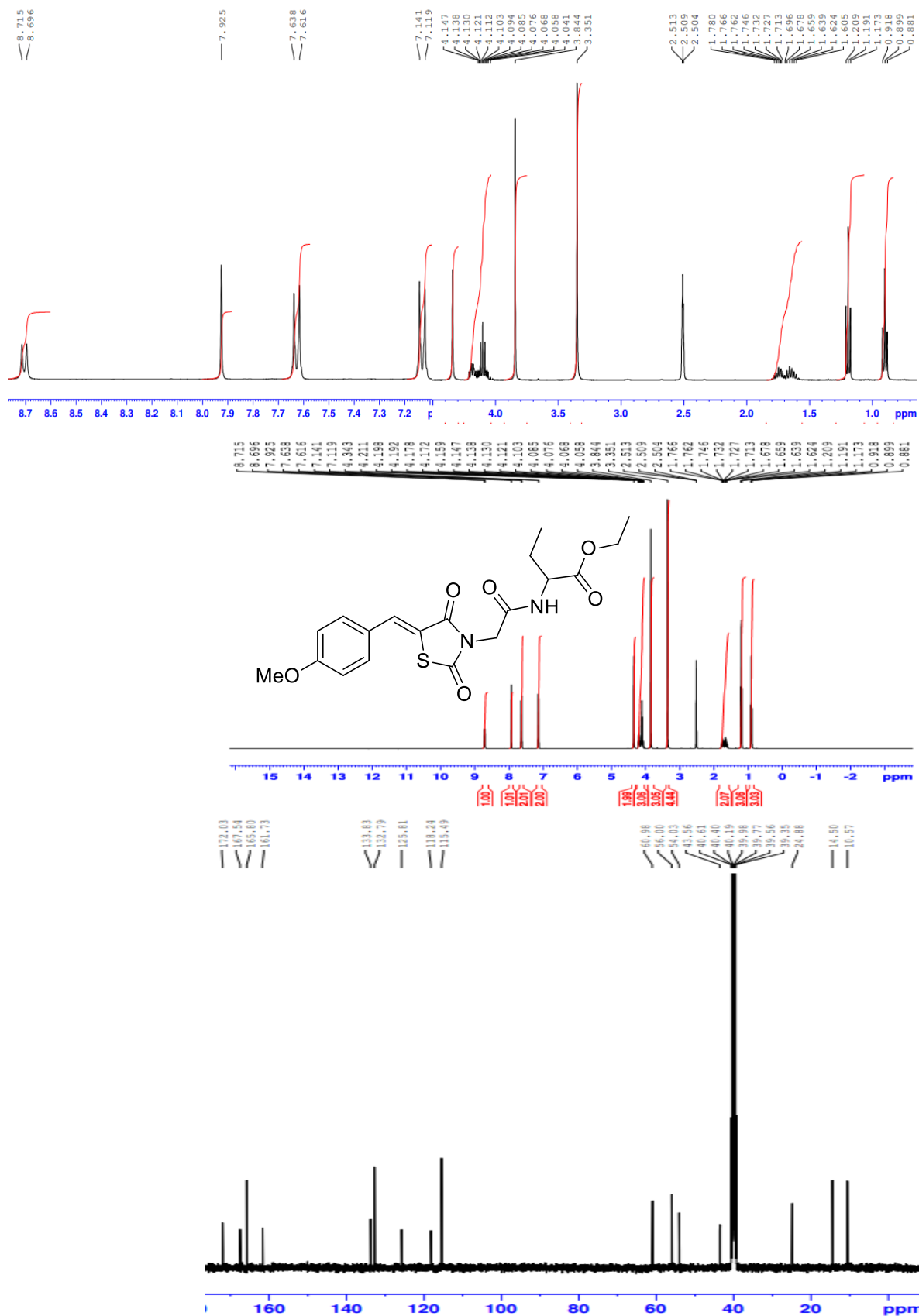
S44. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)alaninate (**13bviii**)



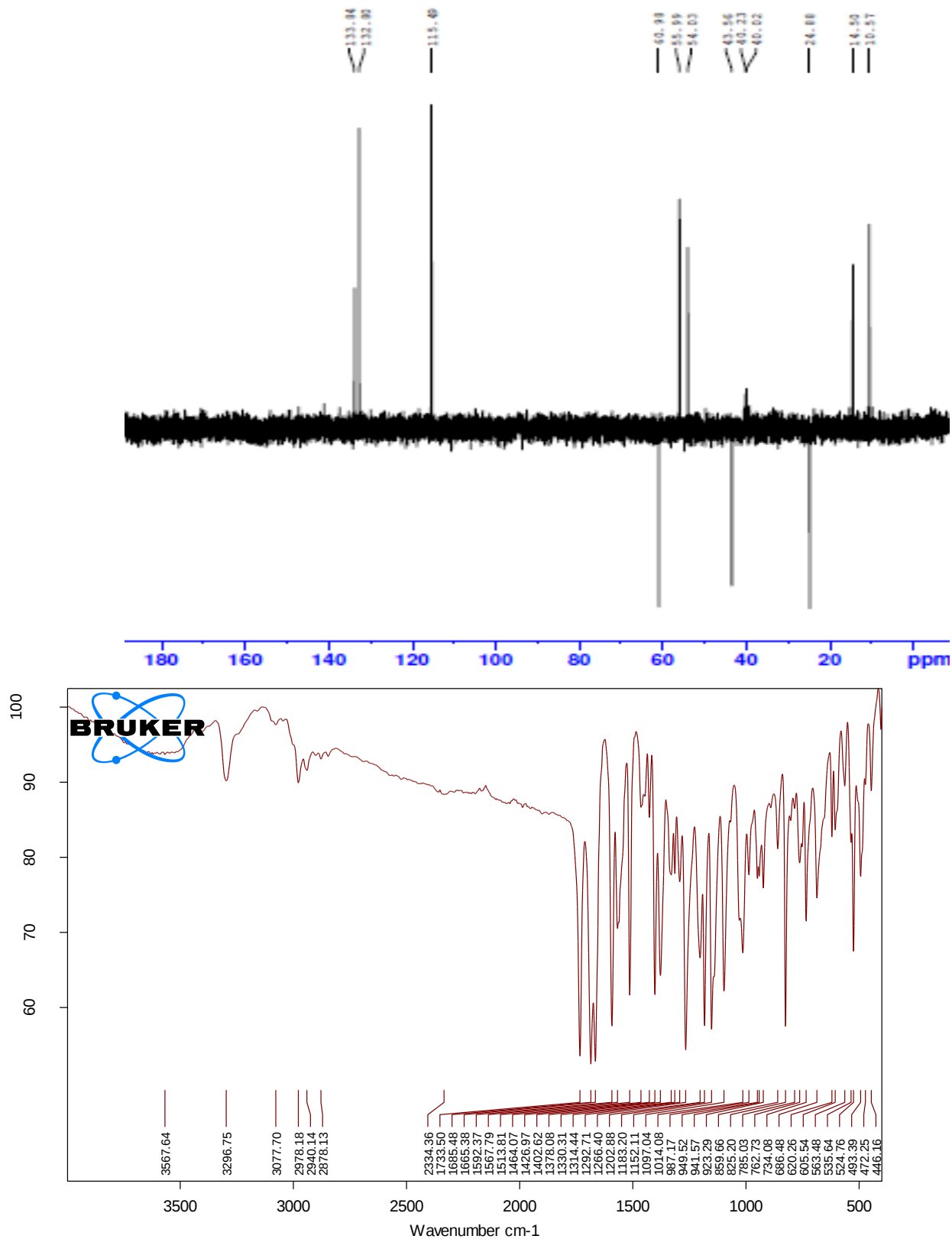
S45.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido) butanoate(**13ci**)

S46. DEPT-135 and IR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido) butanoate(**13ci**)

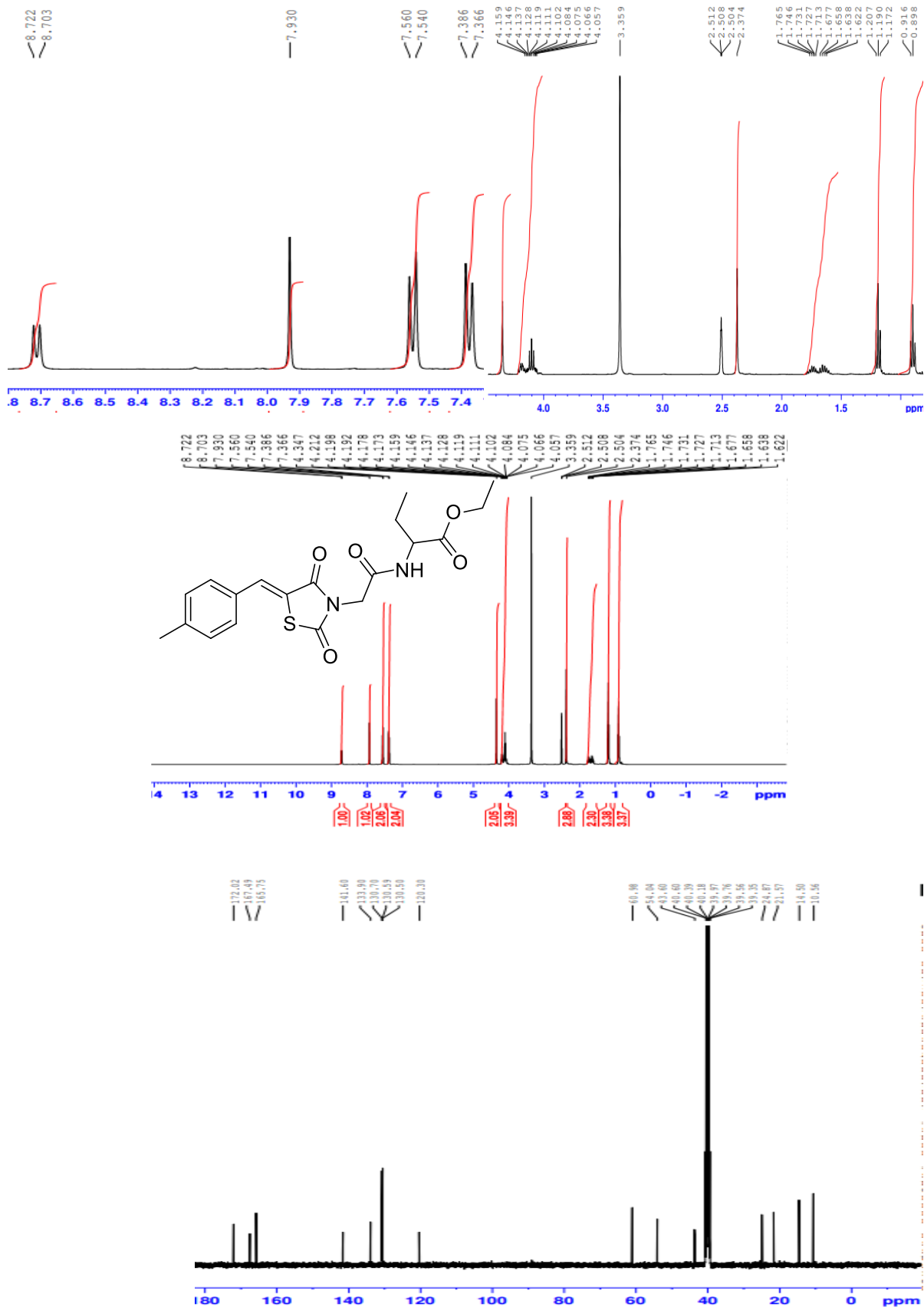


S47.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) butanoate(**13cii**)

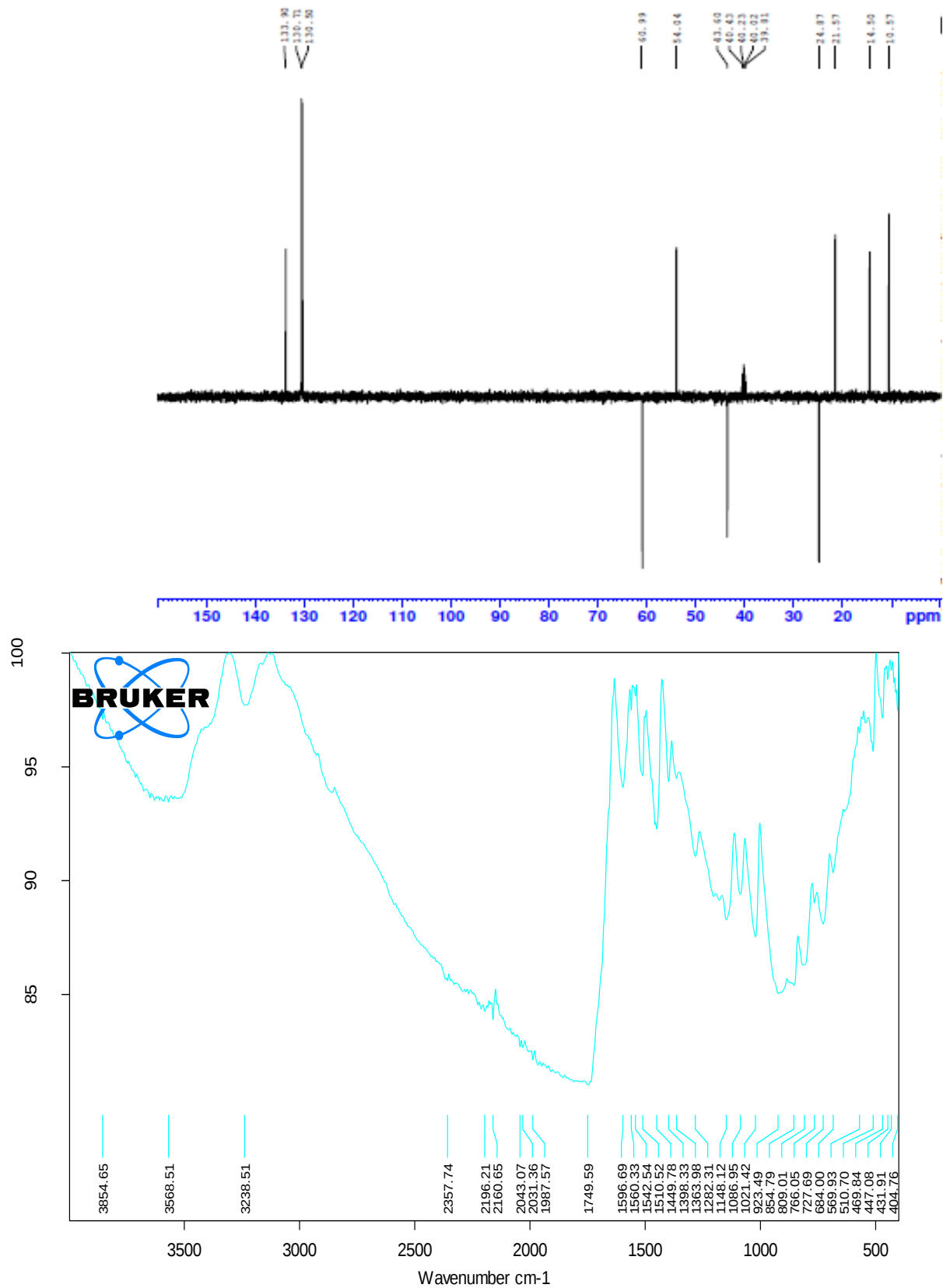
S48. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) butanoate(**13cii**)

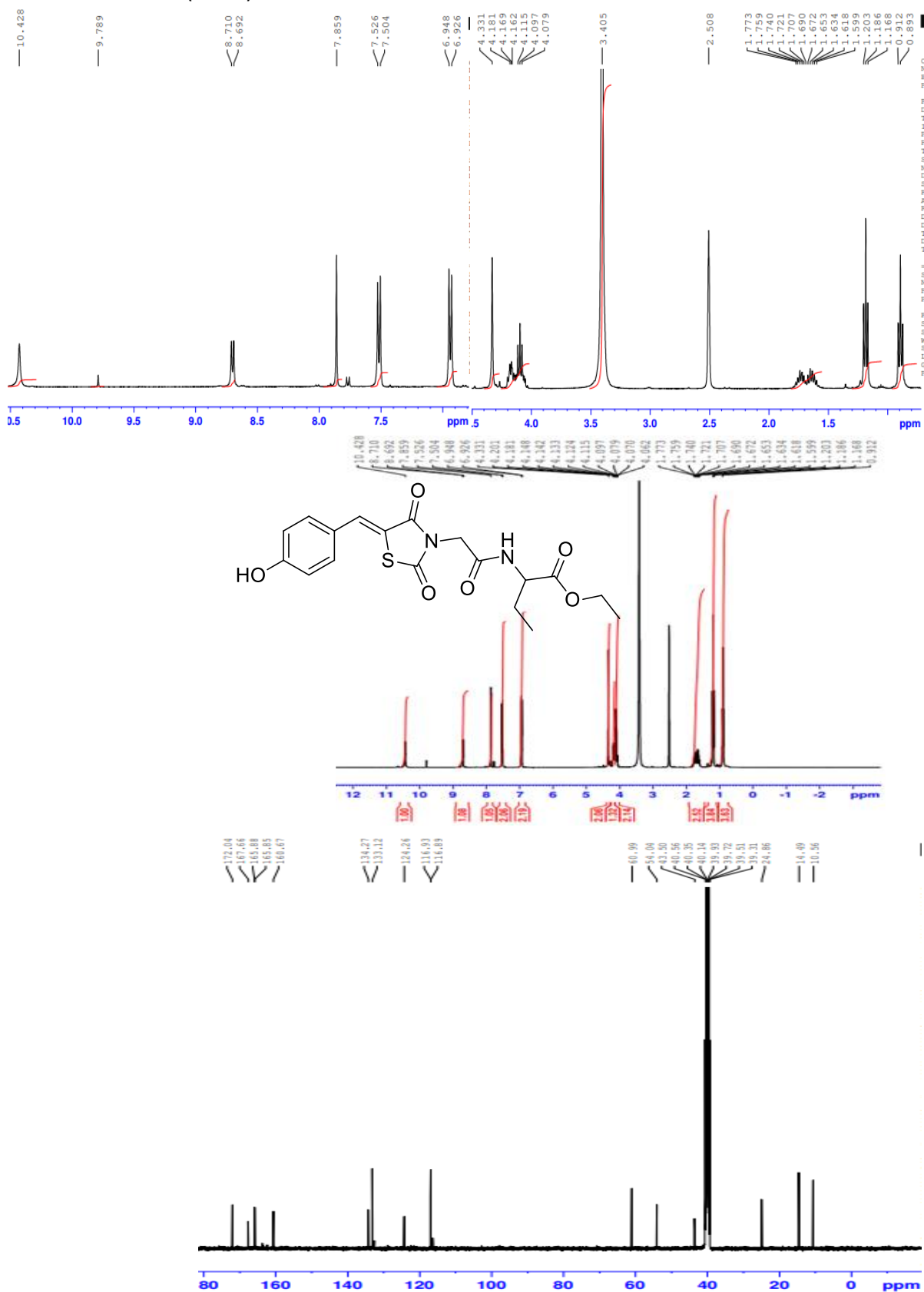


S49.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methylbenzylidene)-2,4dioxothiazolidin-3-yl) acetamido) butanoate(**13ciii**)

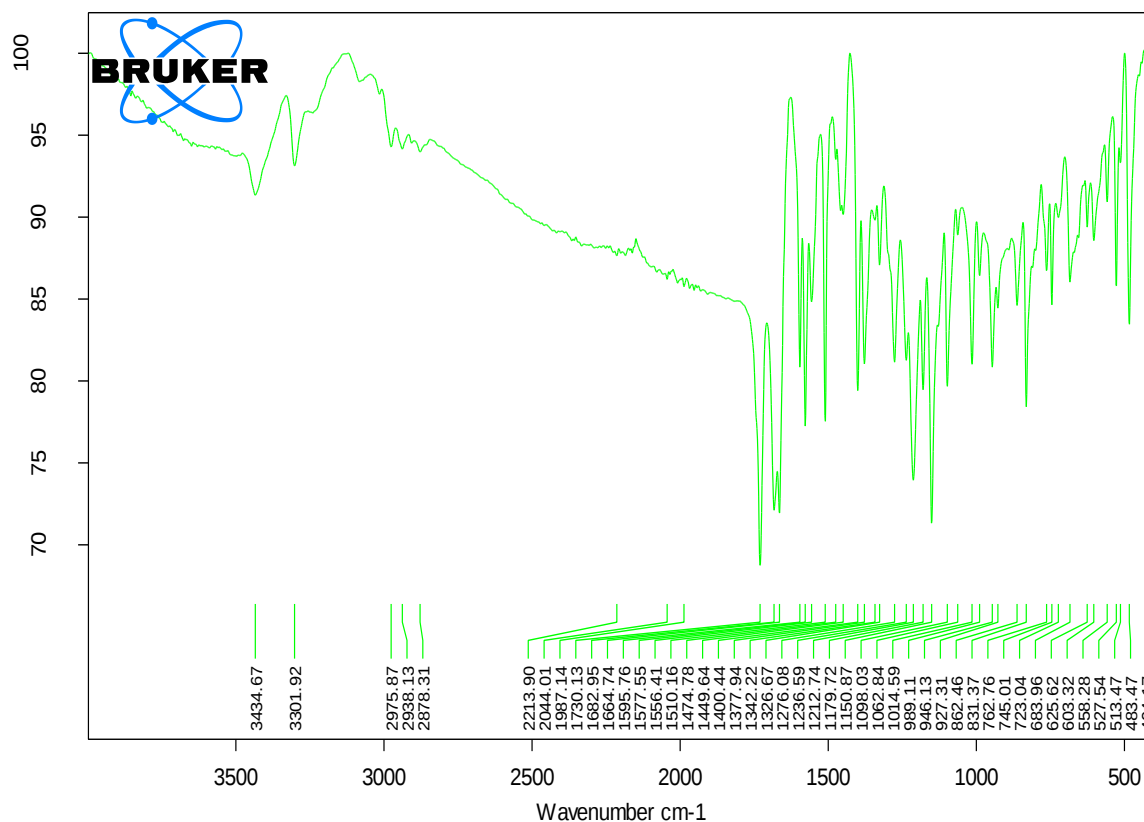
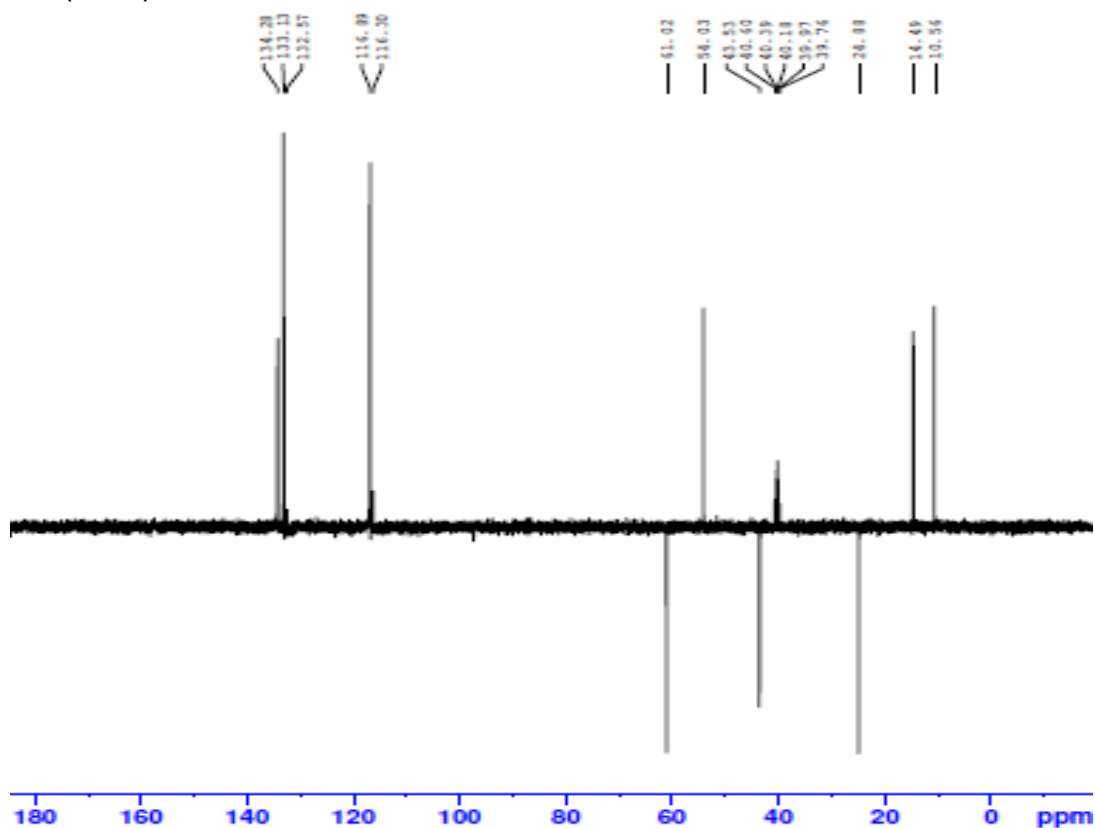


S50. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methylbenzylidene)-2,4dioxothiazolidin-3-yl) acetamido) butanoate(**13ciii**)

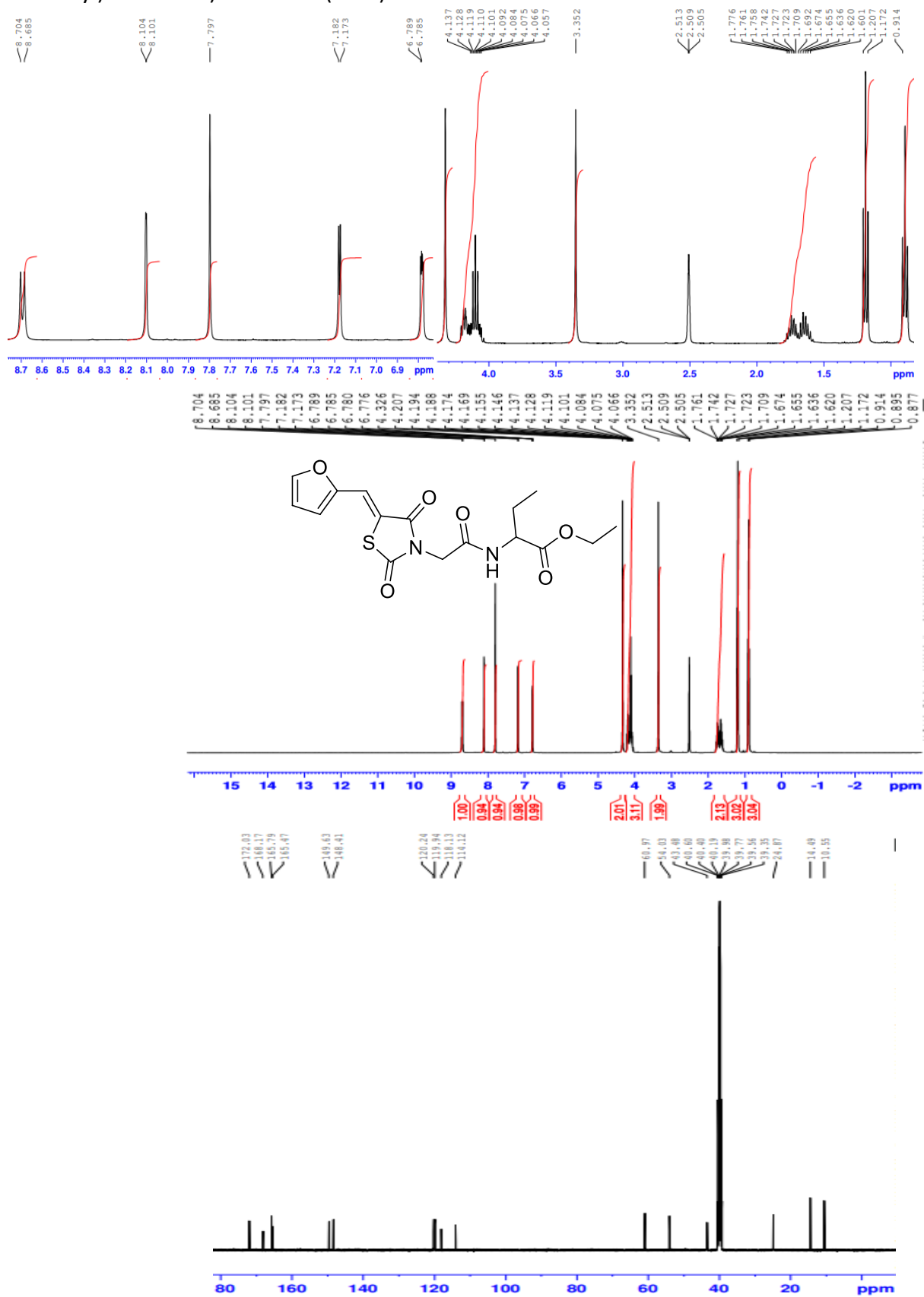


S51.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4dioxothiazolidin-3-yl) acetamido) butanoate(**13civ**)

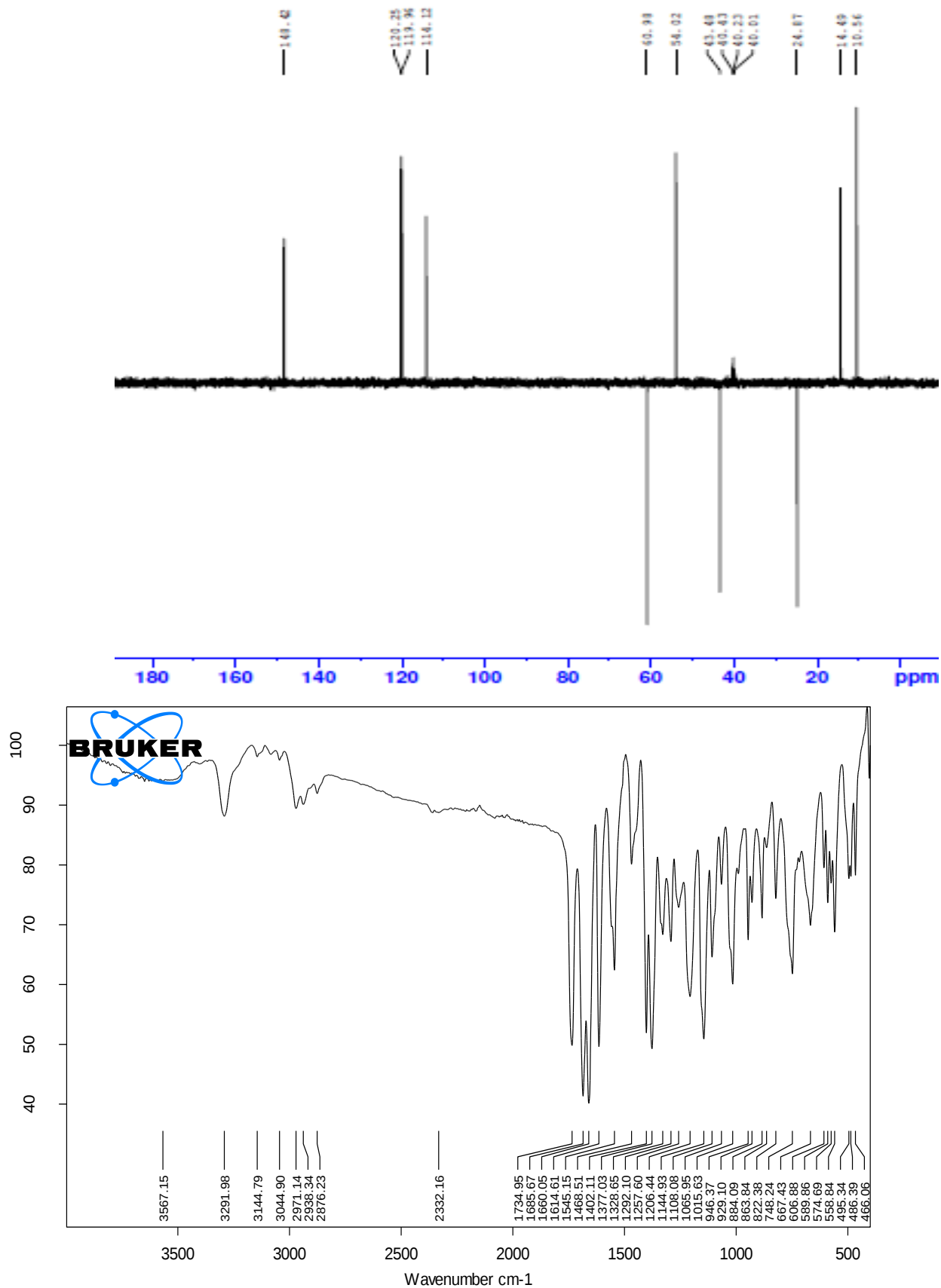
S52. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl) acetamido) butanoate(**13civ**)

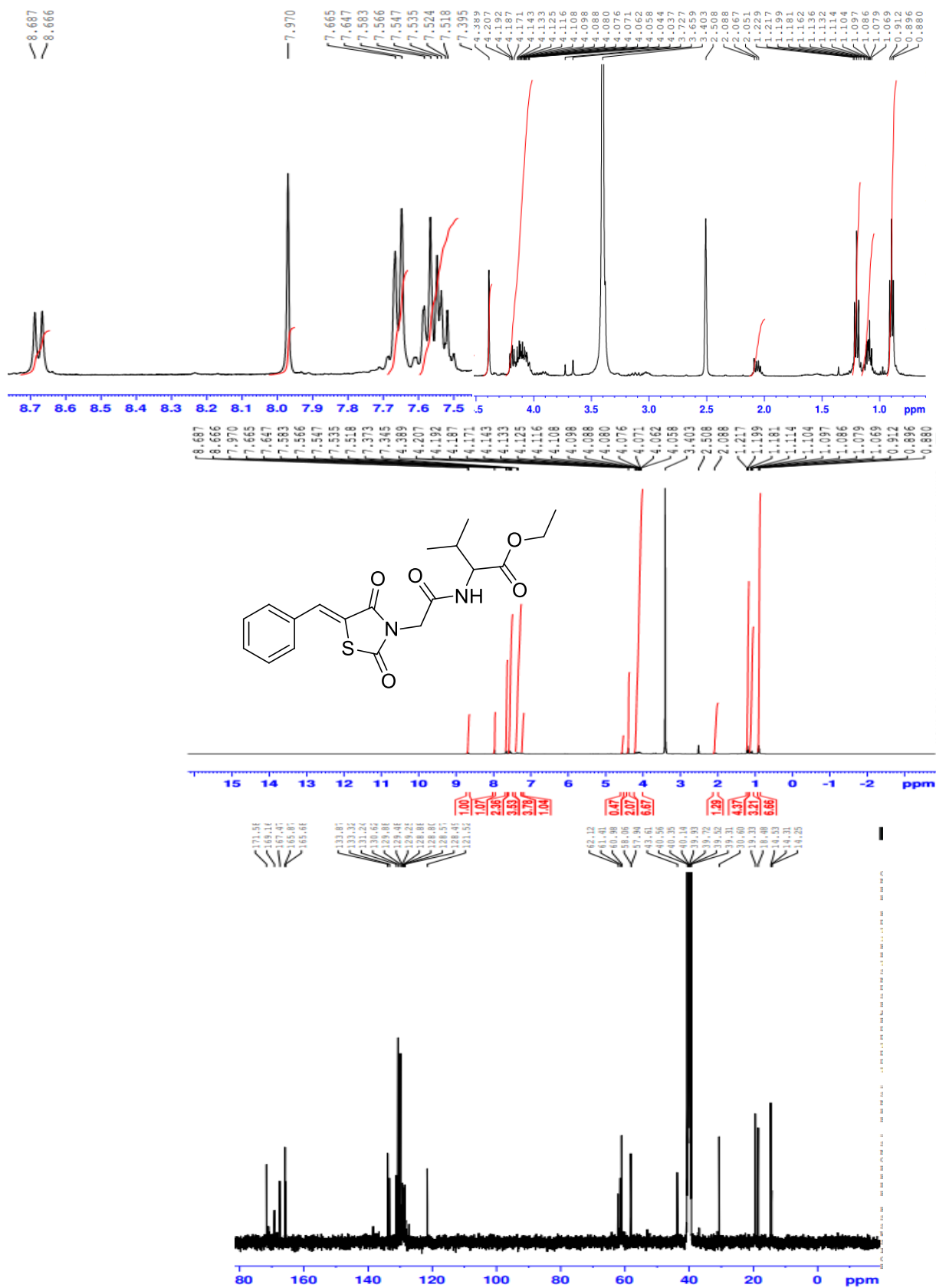


S53.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)butanoate (**13cv**)

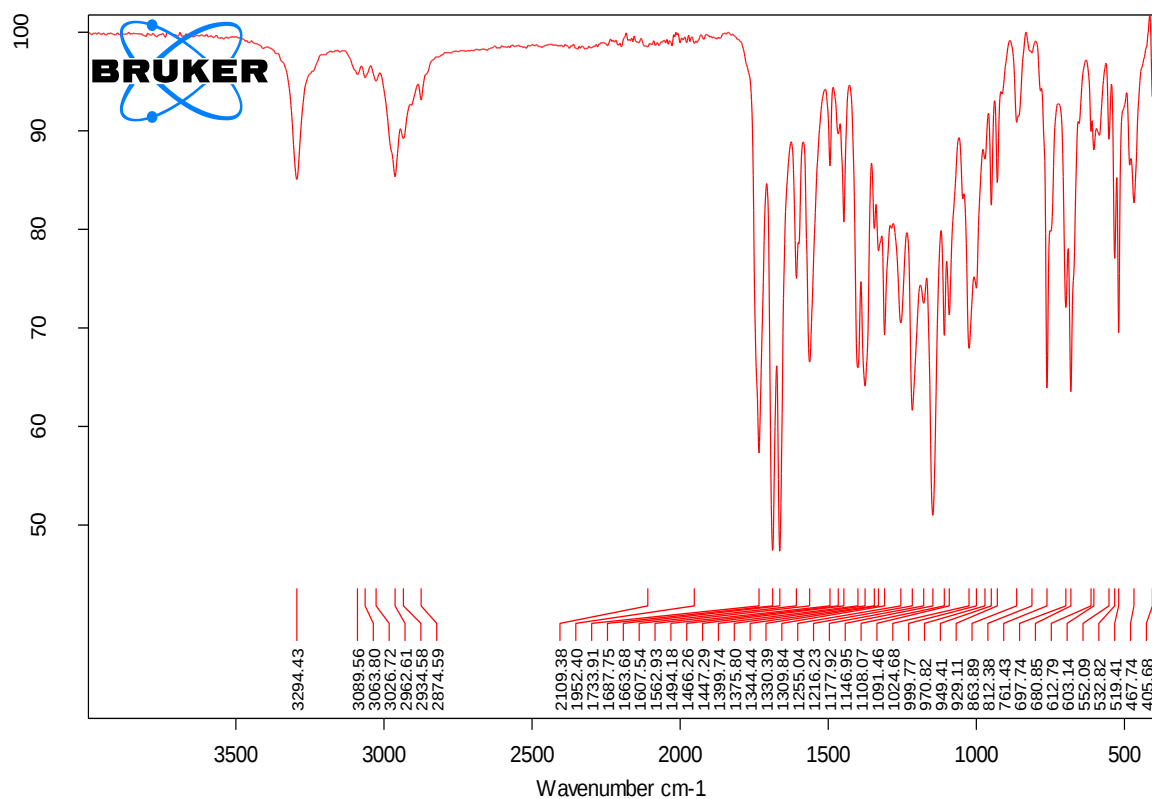
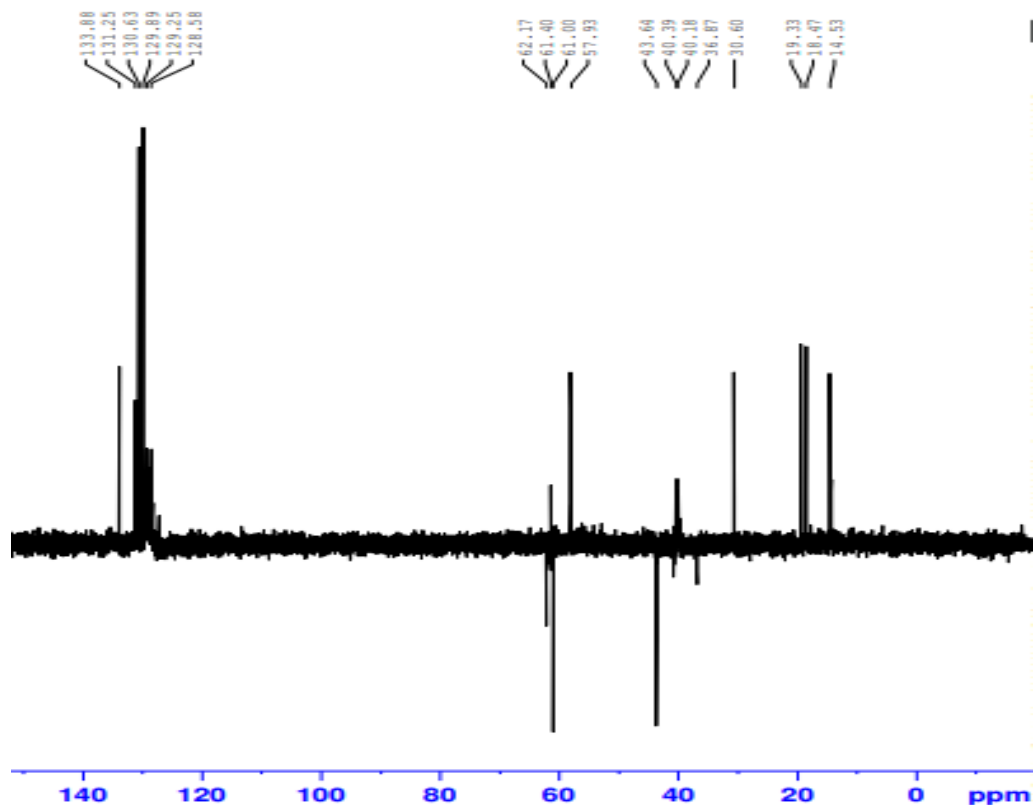


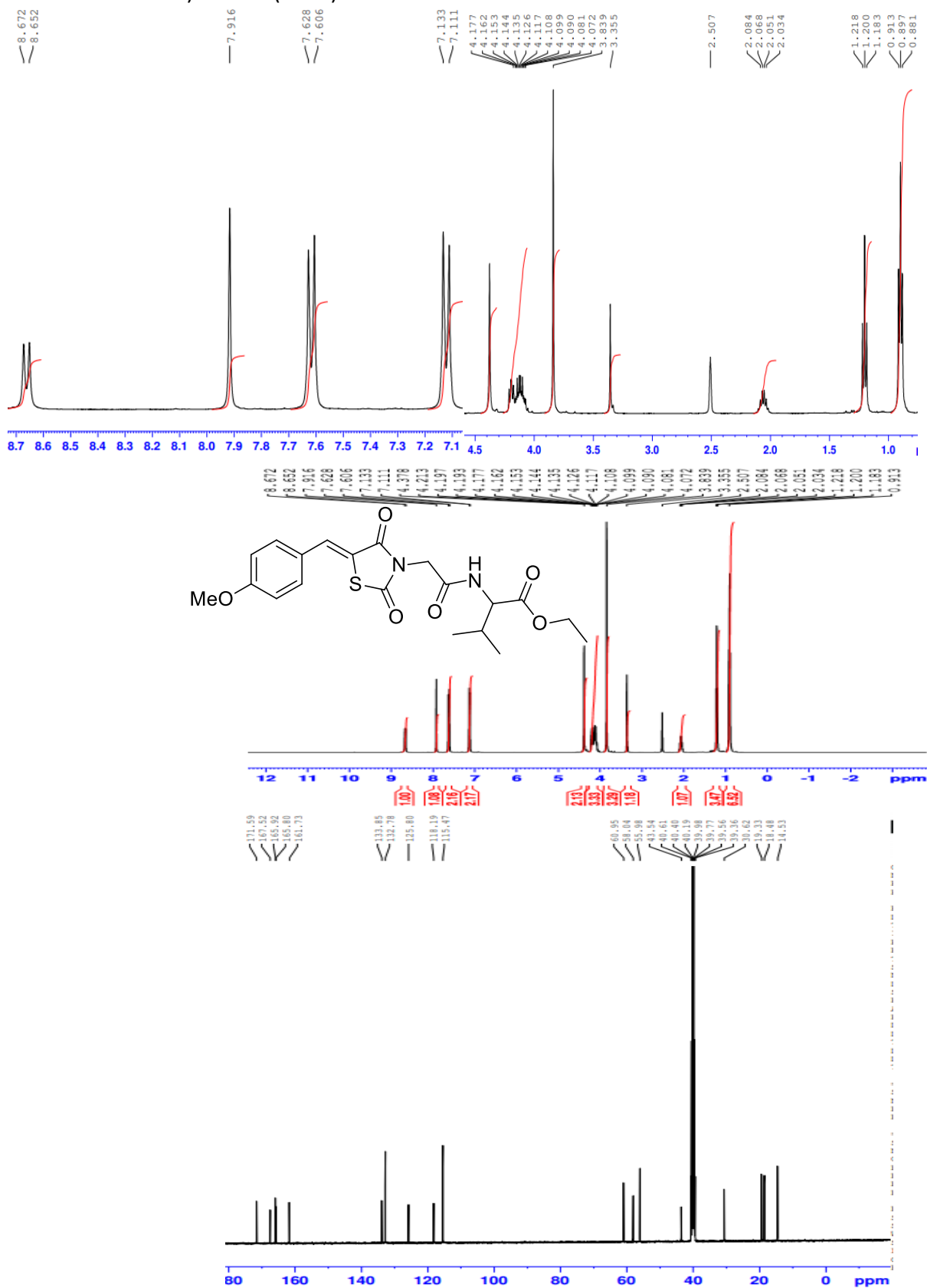
S54. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)butanoate (**13cv**)



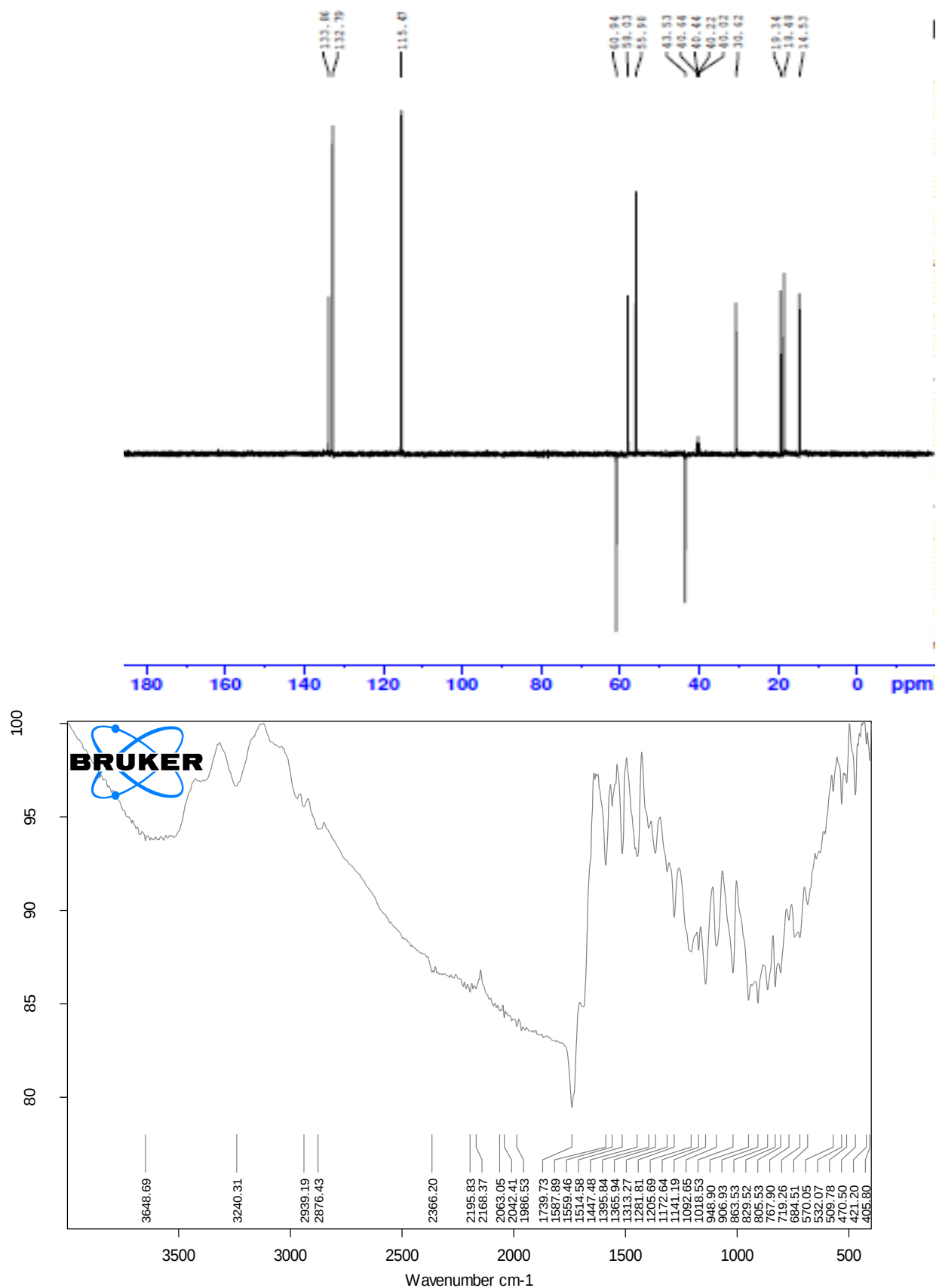
S55.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido)valinate (13di)

S56. DEPT-135 and IR spectra of Ethyl 2-(2-(5-benzylidene-2,4-dioxothiazolidin-3-yl) acetamido)valinate (13di)

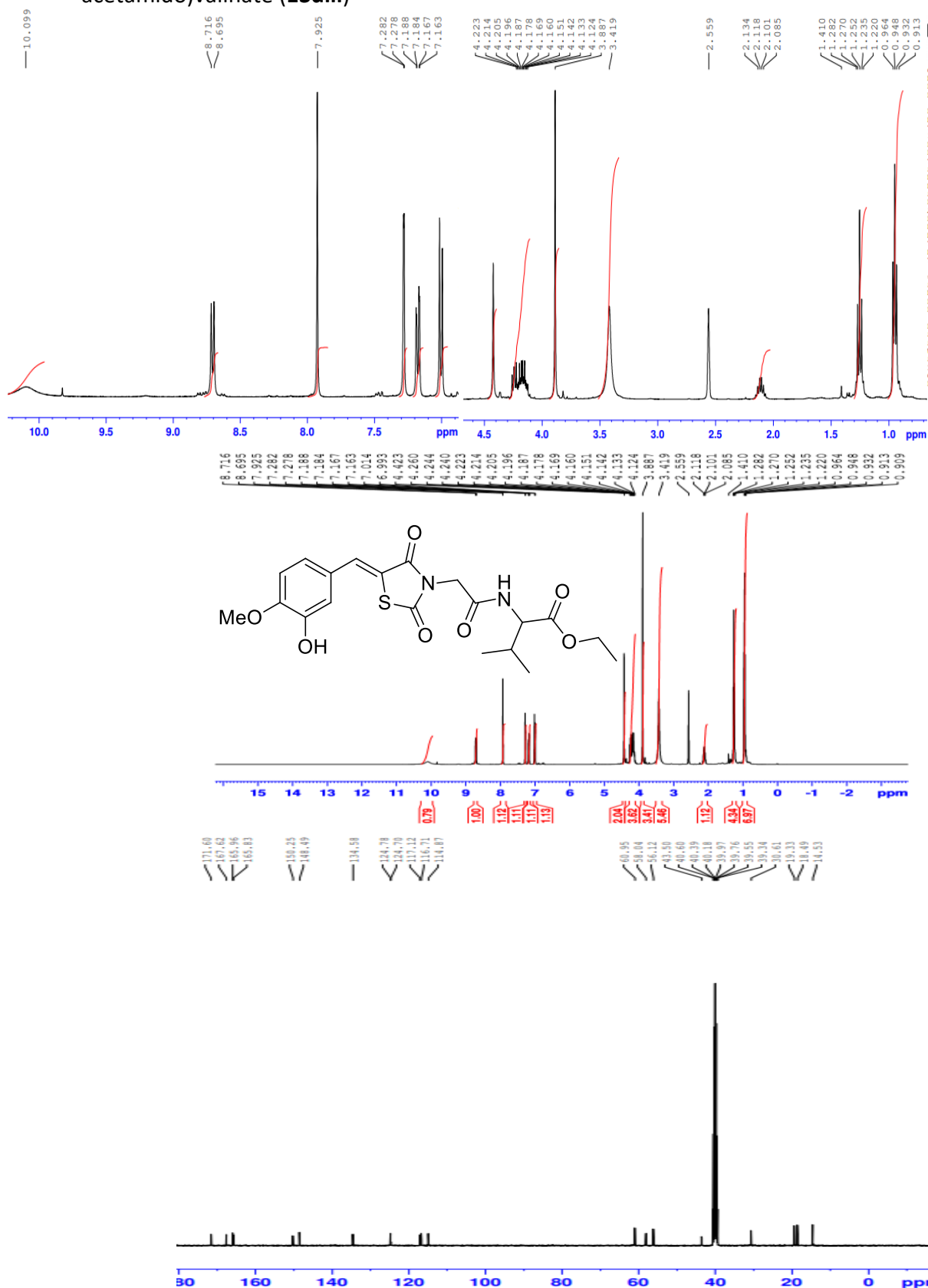


S57.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)valinate(**13dii**)

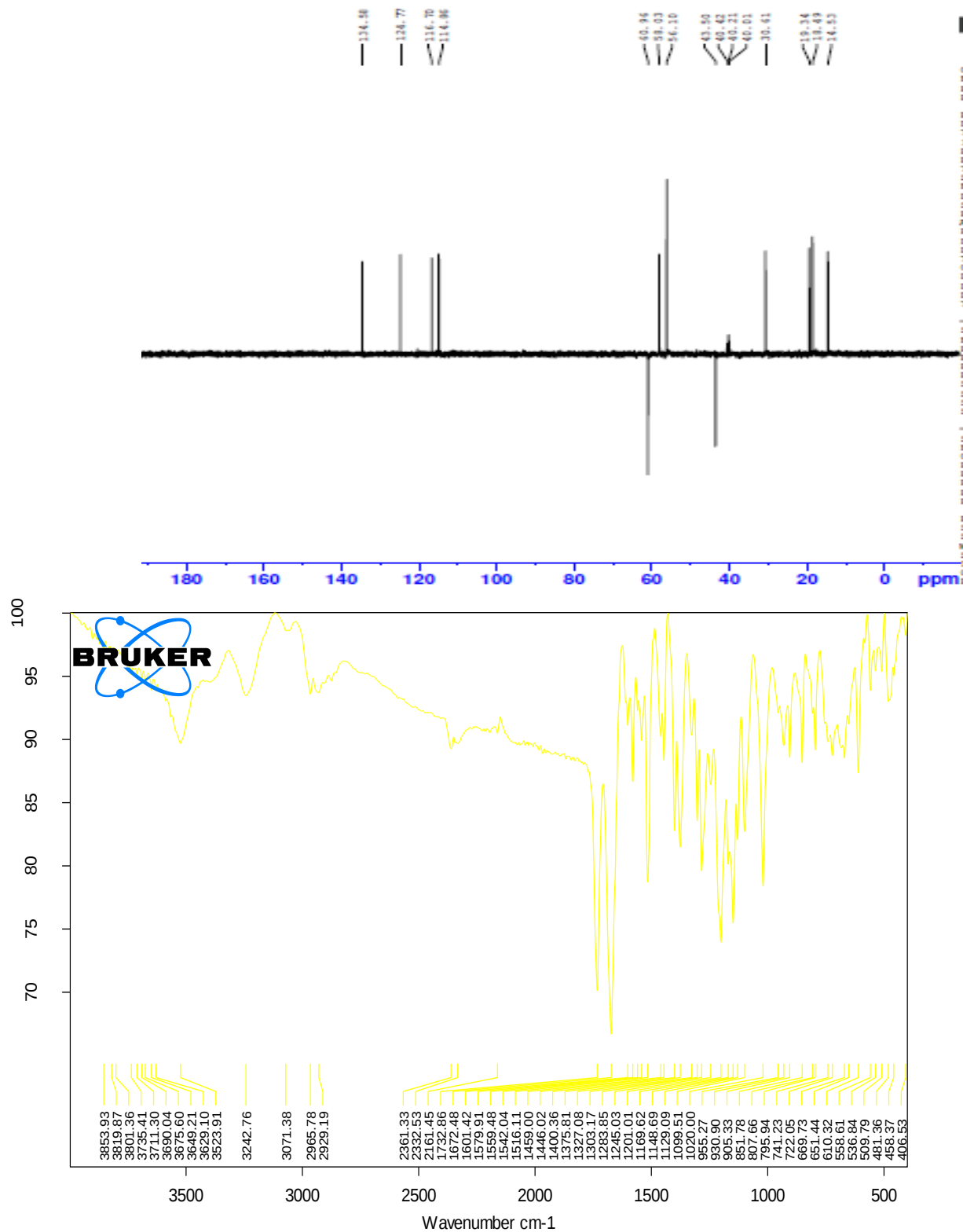
S58. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)valinate(**13dii**)

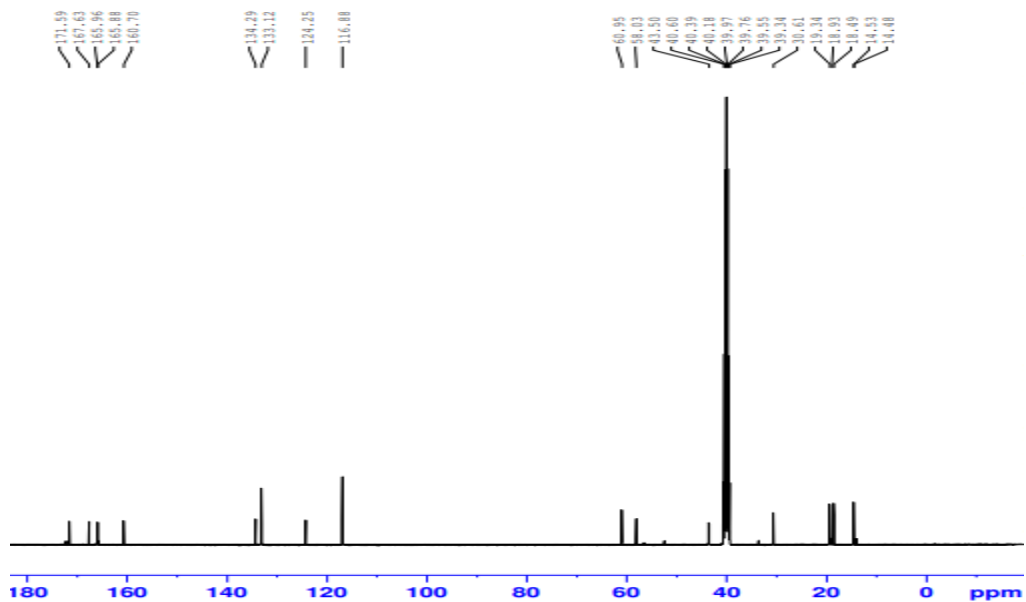
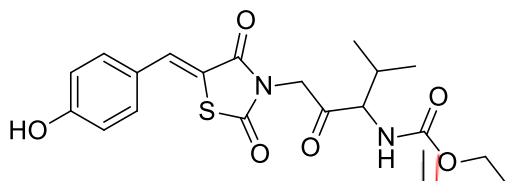
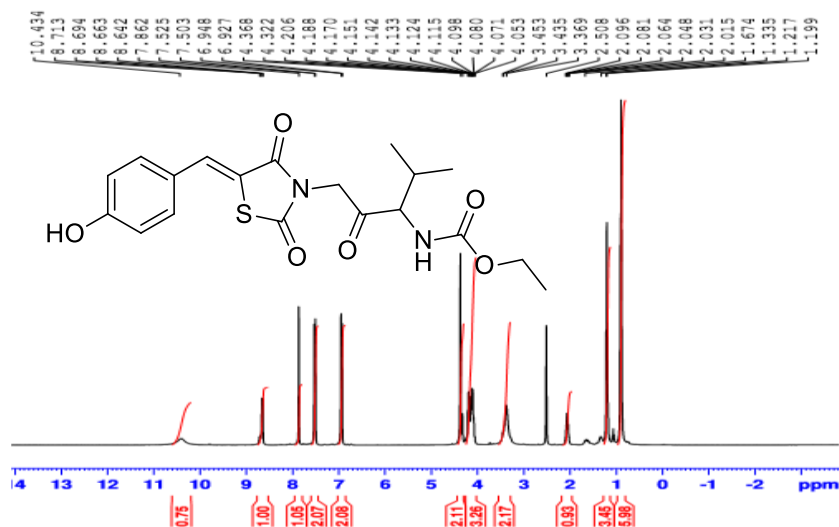
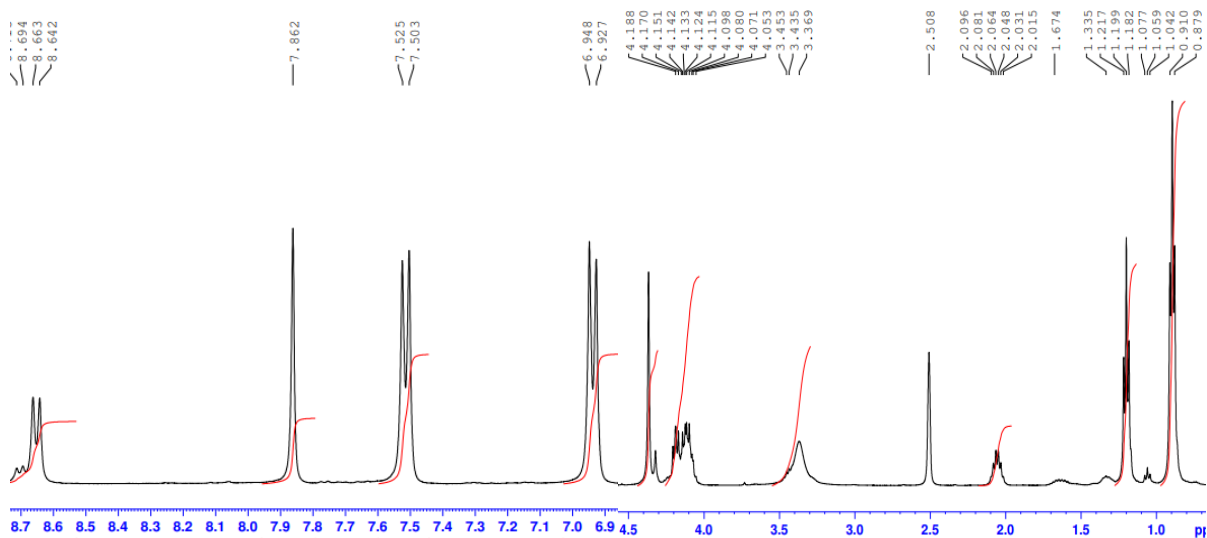


S59.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methoxy-3-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)valinate (**13diii**)

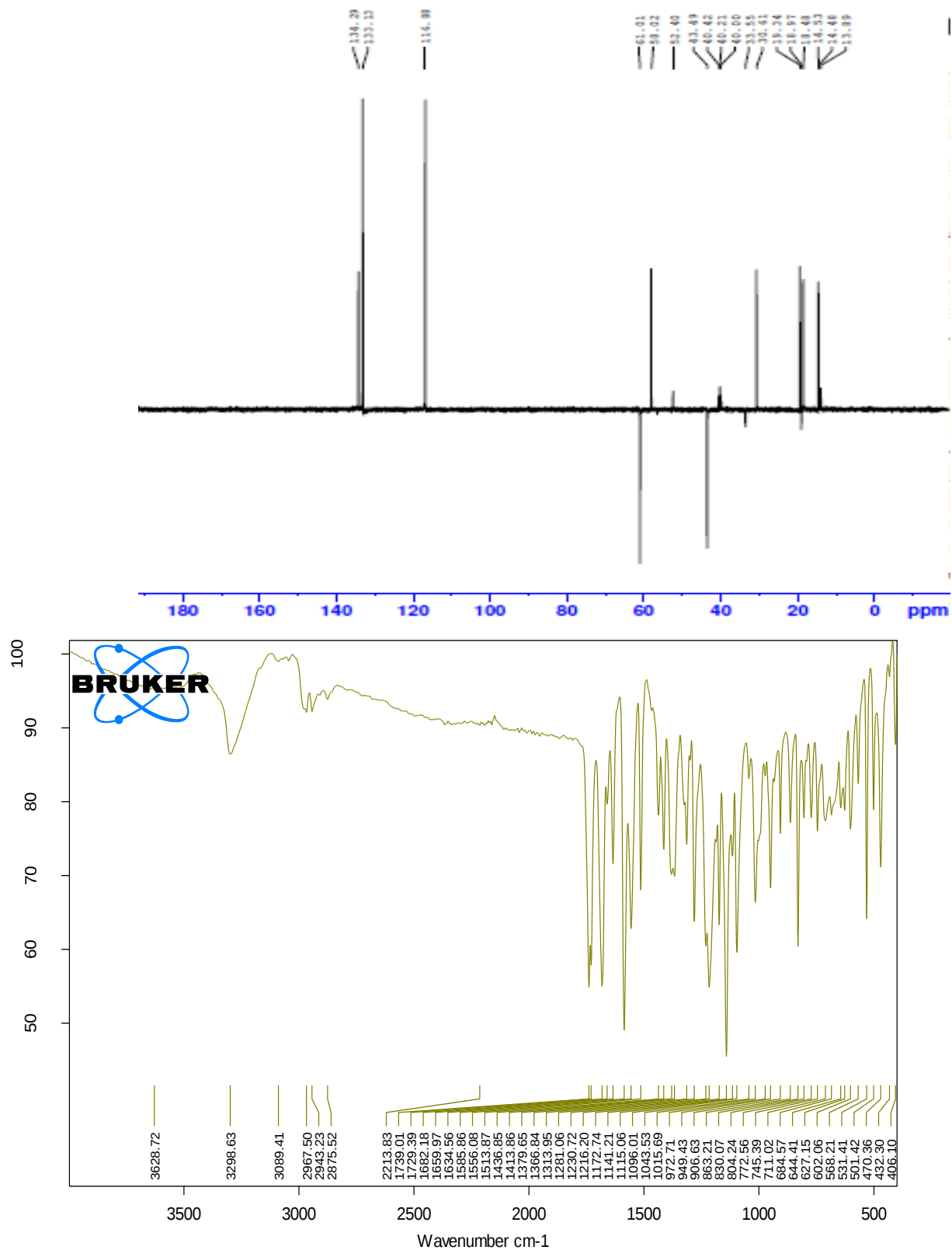


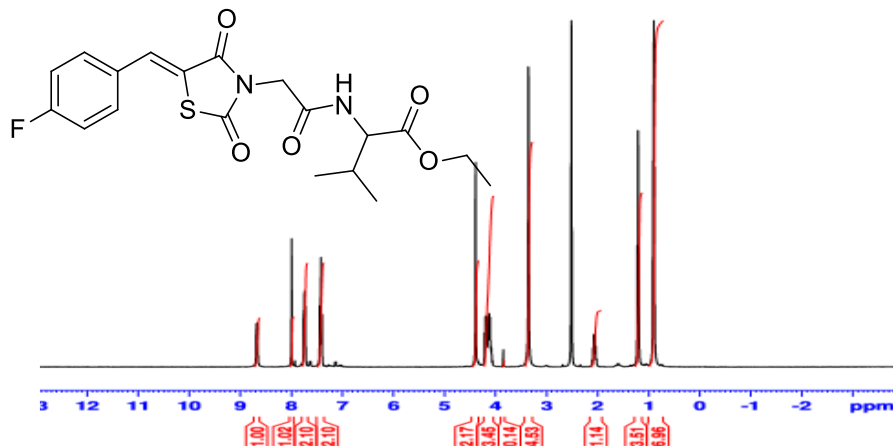
S60. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxy-3-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)valinate (**13diii**)



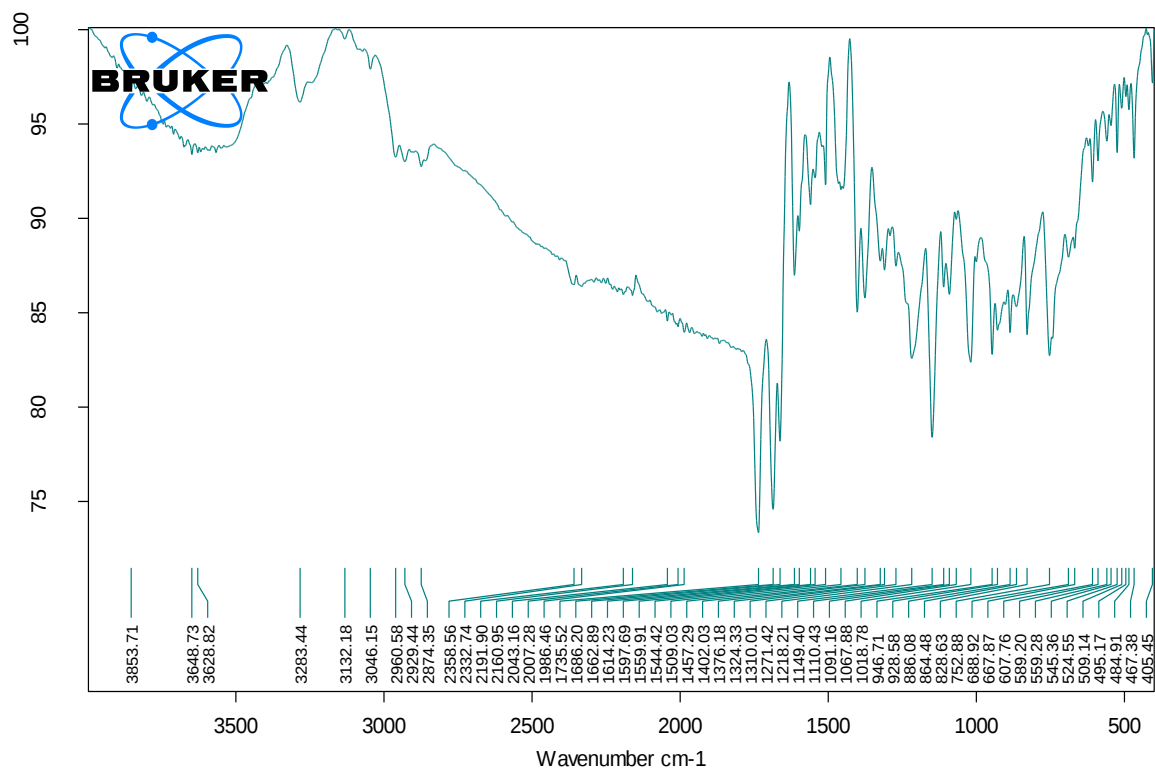
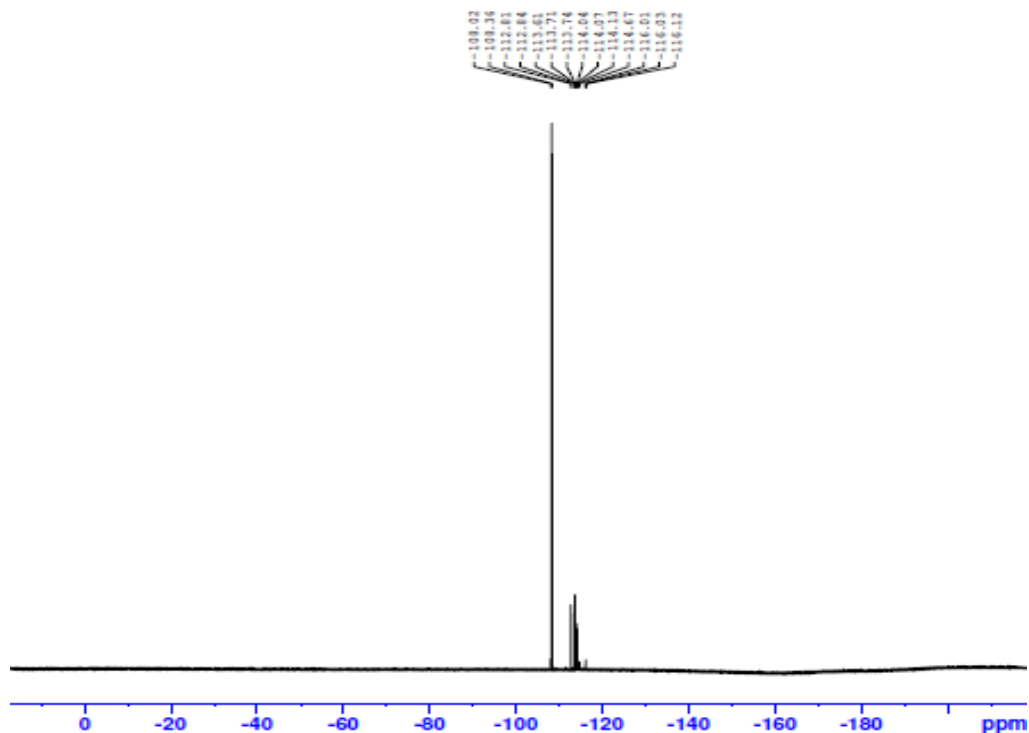
S61.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4dioxothiazolidin-3-yl)acetamido)valinate (**13div**)

S62. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)valinate (**13div**)

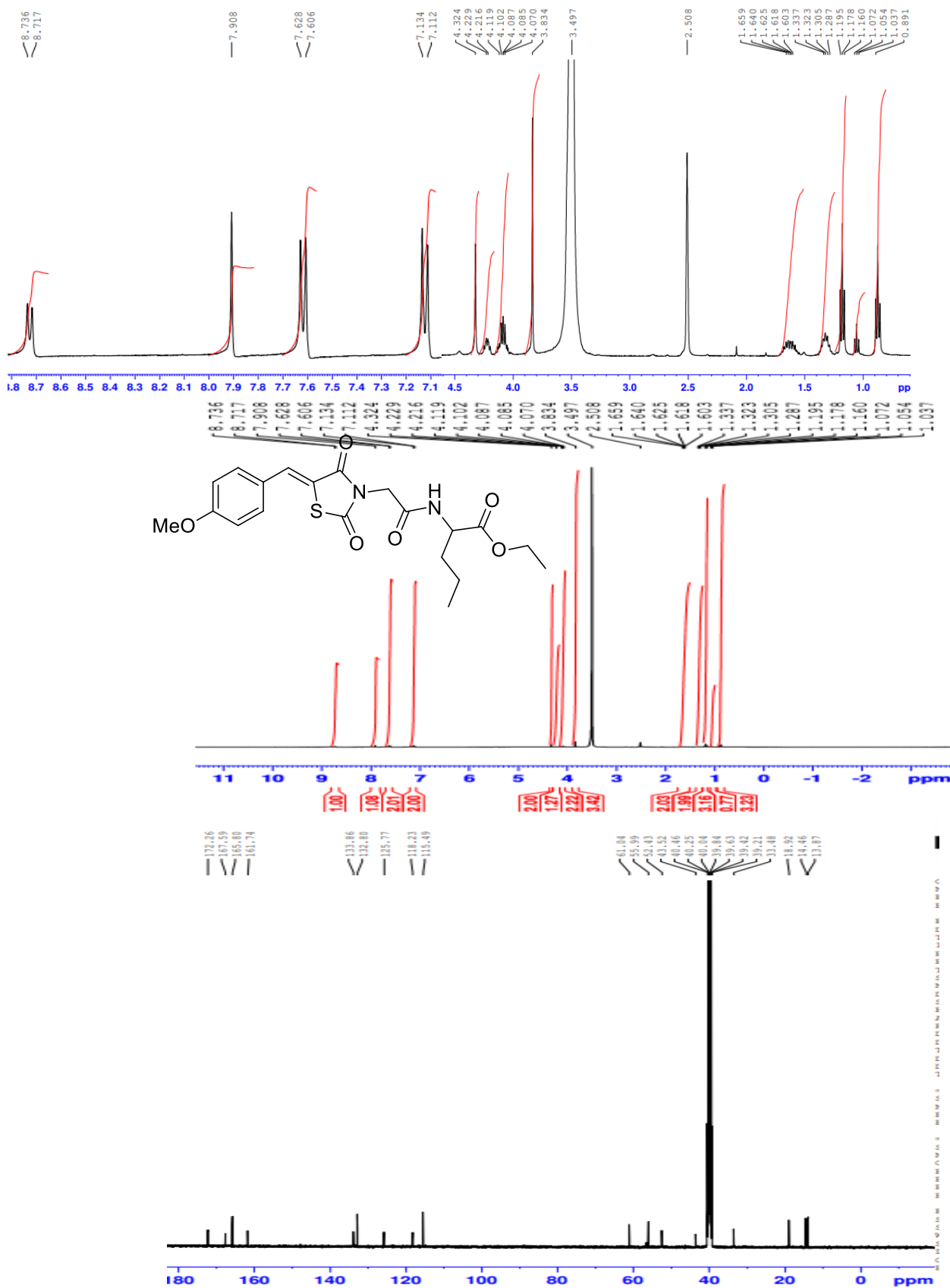


acetamido)valinate (**13dv**)

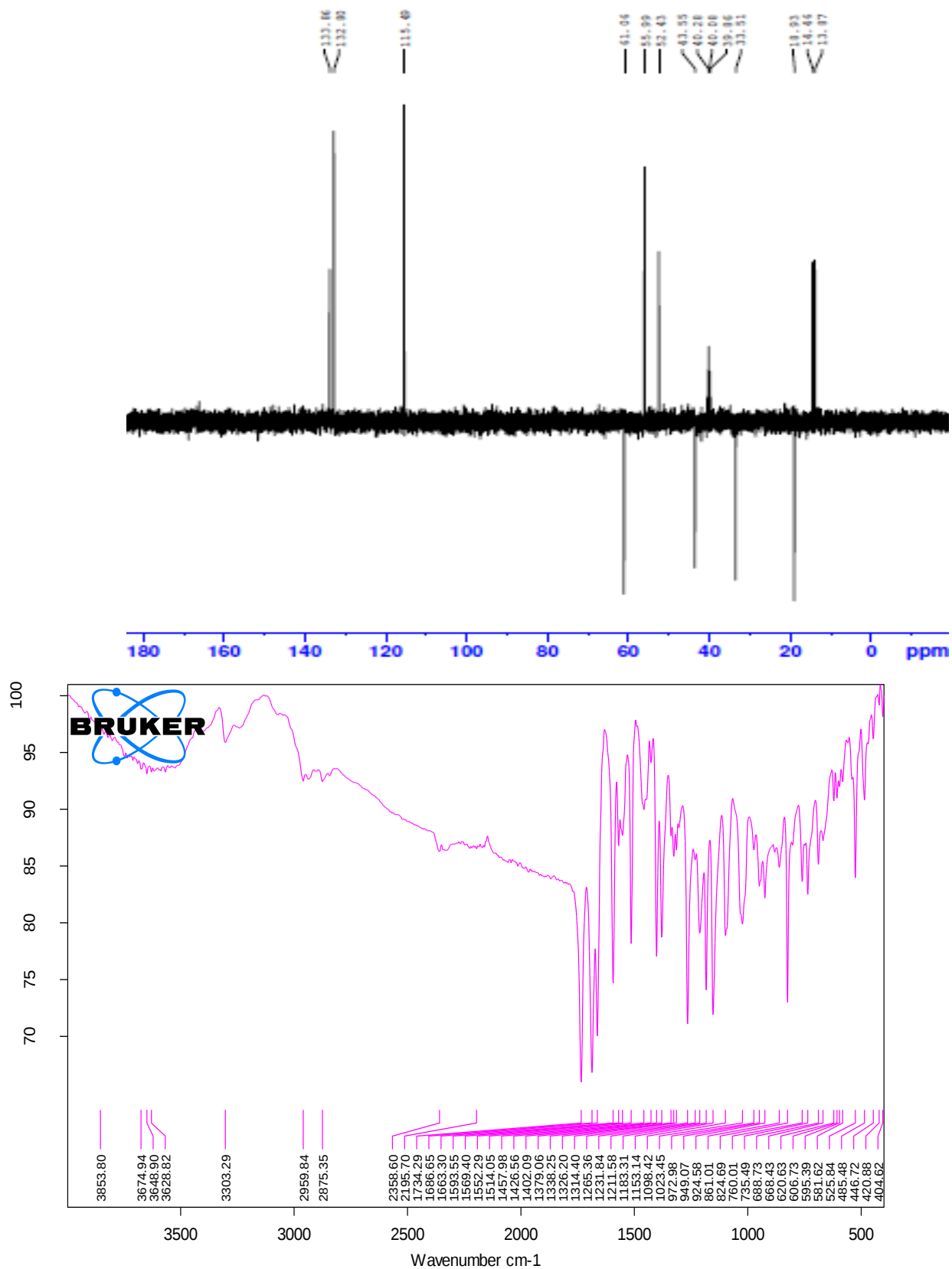
**(13dv)**

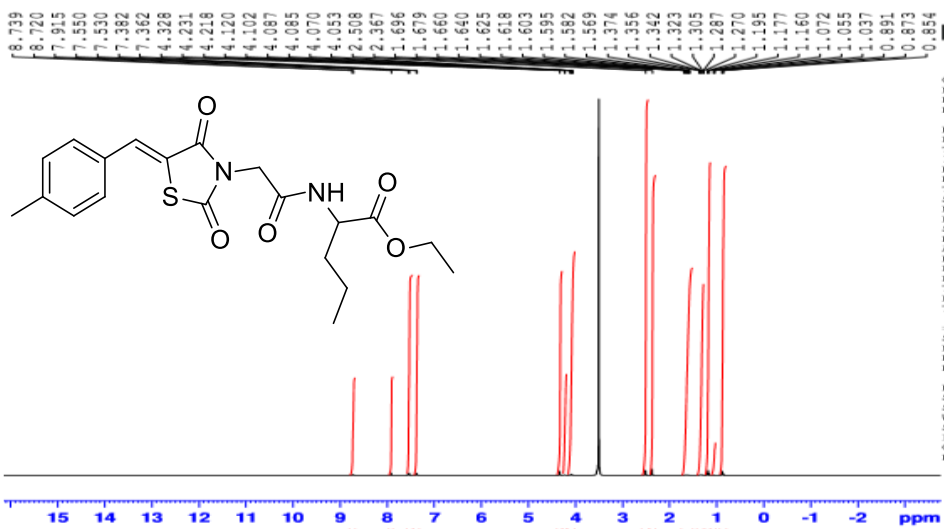


S65.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate(**13ei**)

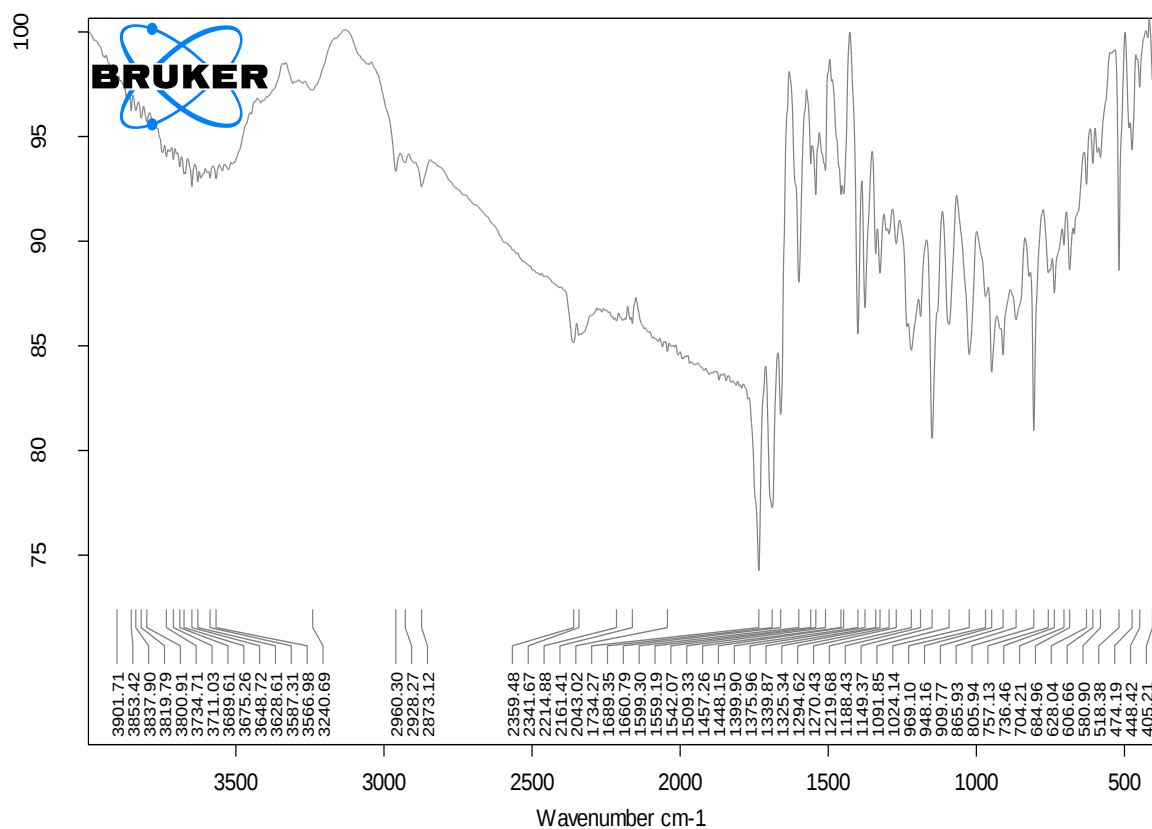
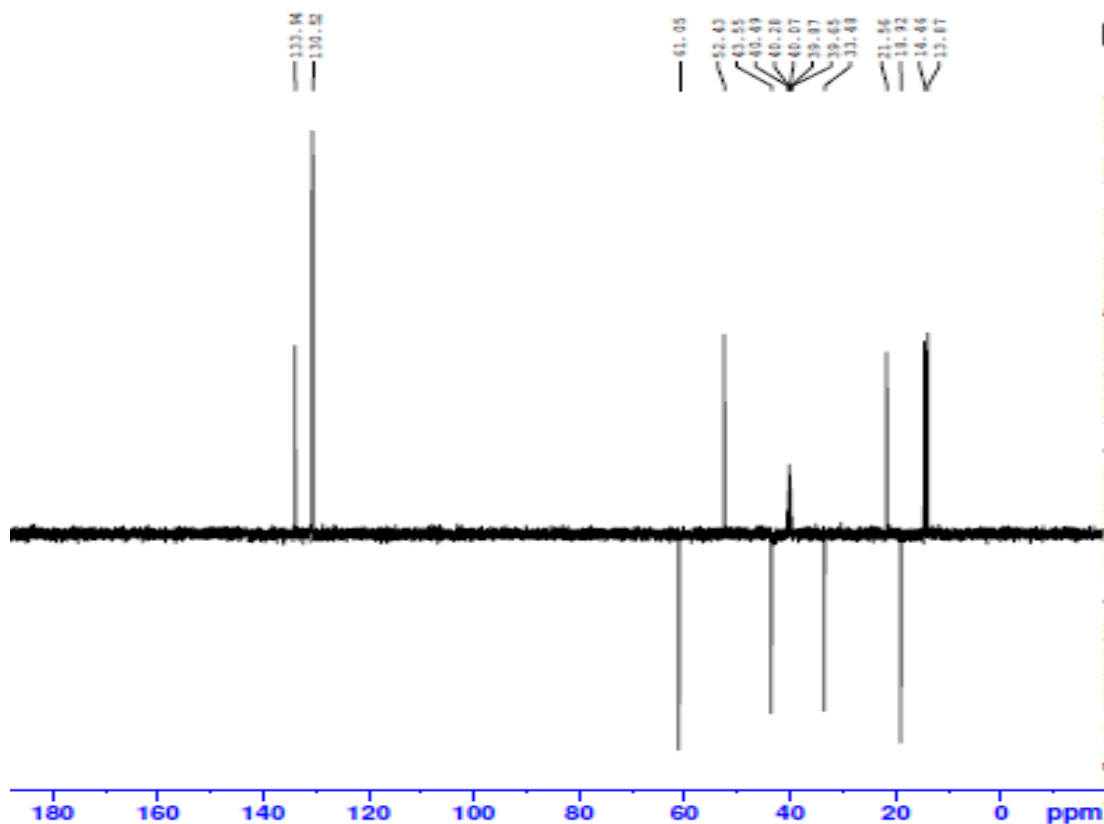


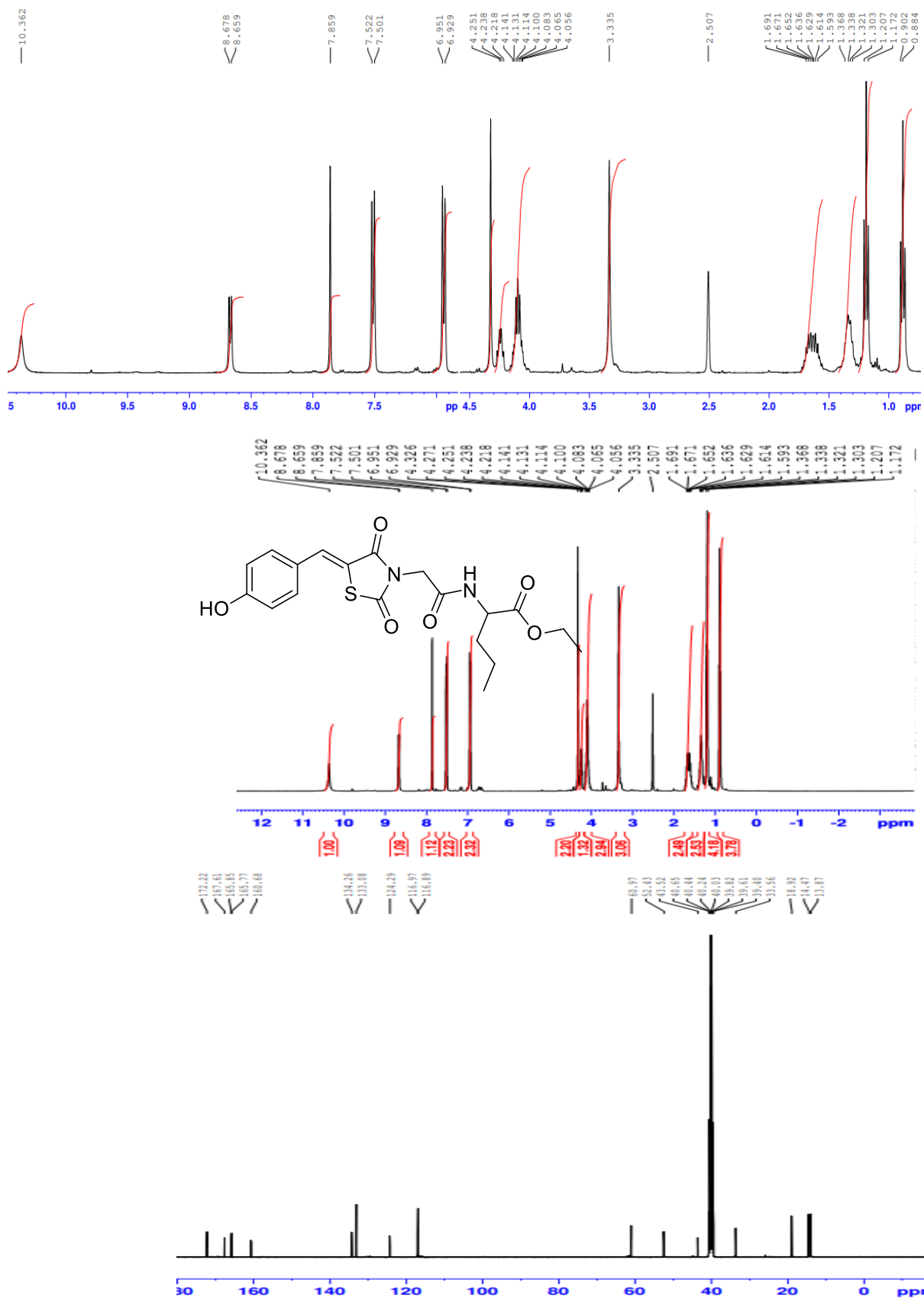
S66. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methoxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate(**13ei**)



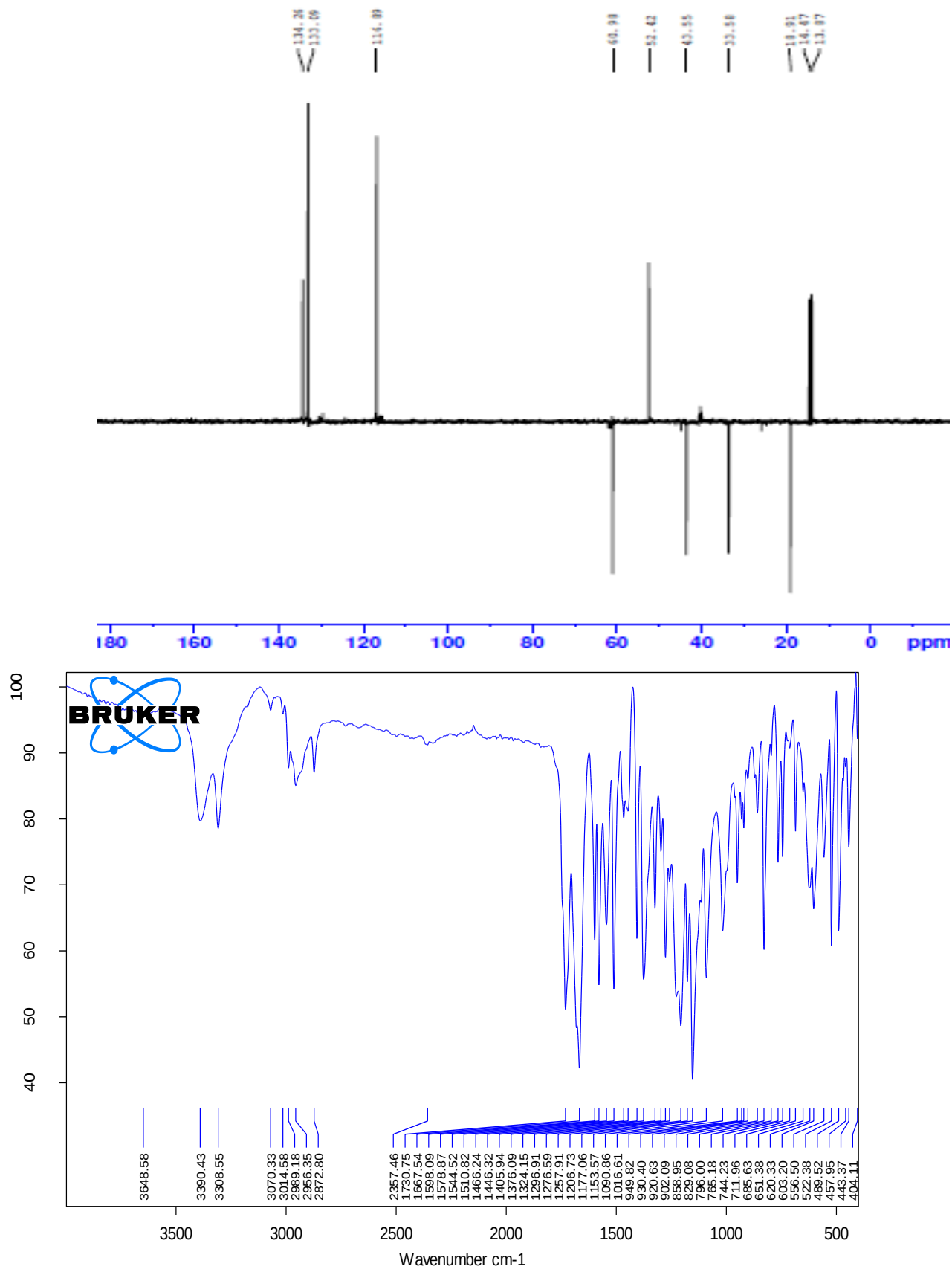
acetamido)norvalinate(**13eii**)

S68. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-methylbenzylidene)-2,4dioxothiazolidin-3-yl)acetamido)norvalinate(**13eii**)

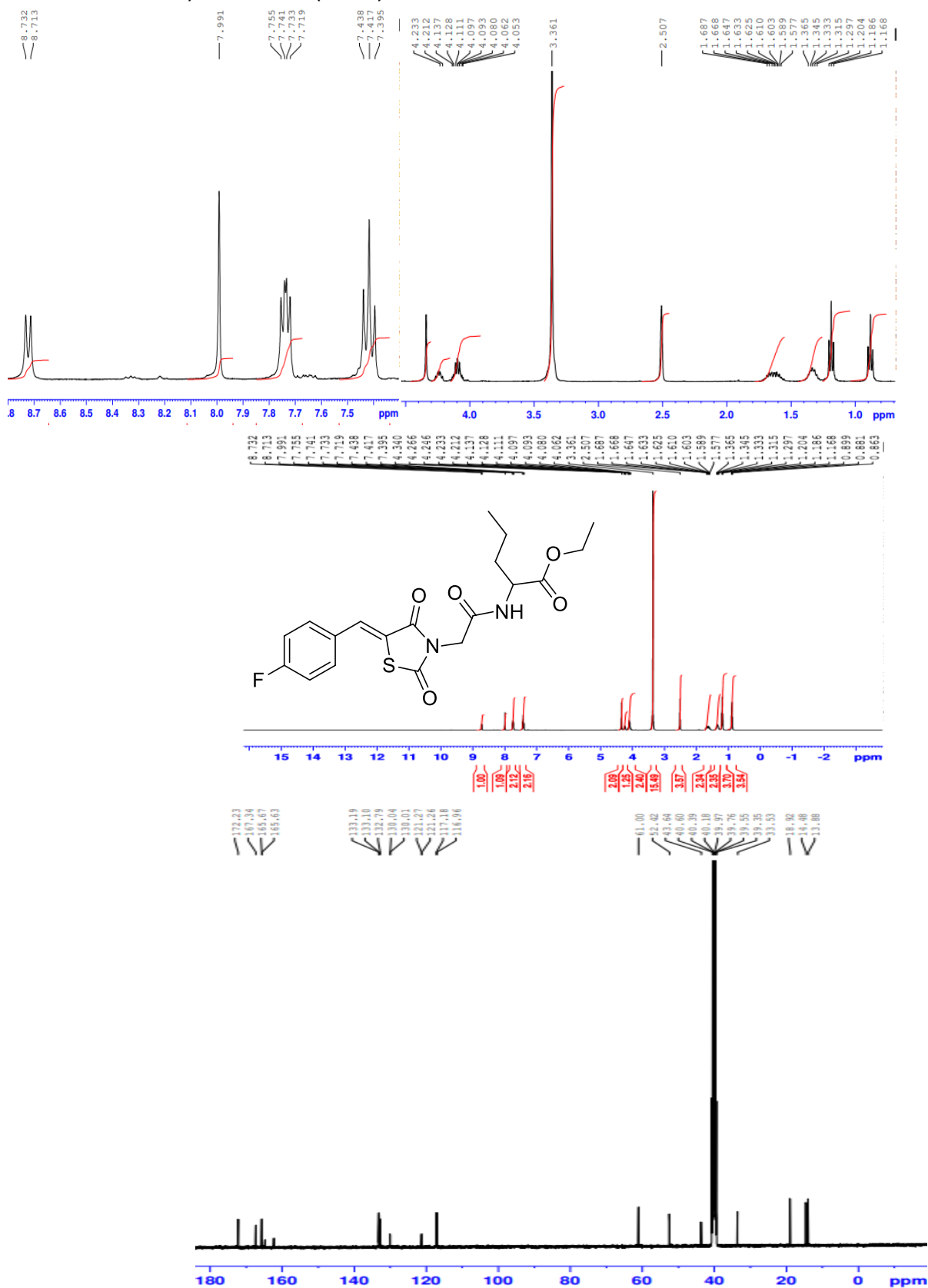


S69.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4dioxothiazolidin-3-yl)acetamido)norvalinate (**13eiii**)

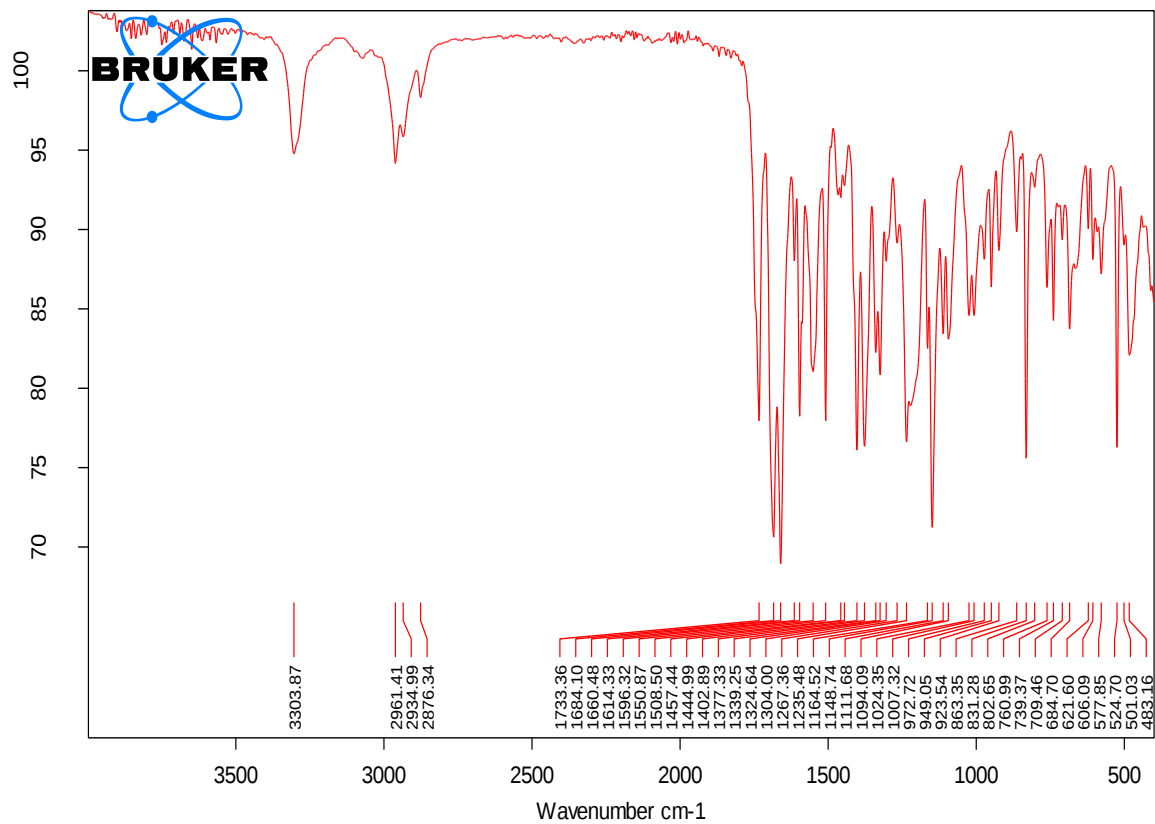
S70. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(4-hydroxybenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate (**13eiii**)



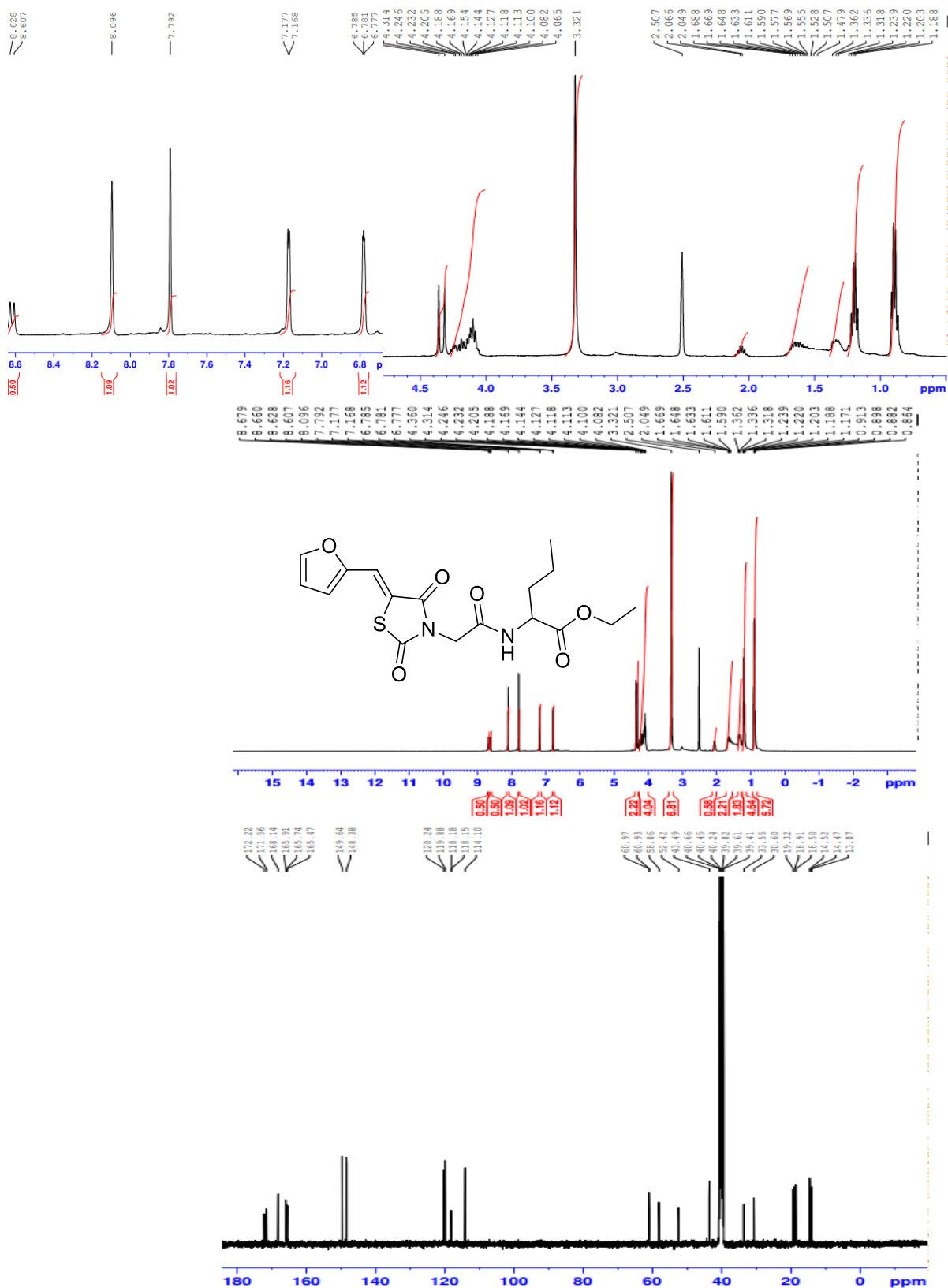
S71.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(4-fluorobenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate (**13eiv**)



S72.  $^{19}\text{F}$  and IR spectra of Ethyl 2-(2-(5-(4-fluorobenzylidene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate (**13eiv**)



S73.  $^1\text{H}$  and  $^{13}\text{C}$  NMR spectra of Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate (**13ev**)



S74. DEPT-135 and IR spectra of Ethyl 2-(2-(5-(furan-2-ylmethylene)-2,4-dioxothiazolidin-3-yl)acetamido)norvalinate (**13ev**)

